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PAPERS AND PROCEEDINGS

OF THE

Sixty-second Annual Meeting

OF THE

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New York, New York, December 27-30, 1949

*Edited by James Washington Bell, Secretary of the Association
and*

Gertrude Tait, Executive Assistant

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PROGRAM OF THE SIXTY-SECOND ANNUAL MEETING OF THE
AMERICAN ECONOMIC ASSOCIATION

New York, New York, December 27-30, 1949

The central theme of most of the sessions of the 1949 program is "A Stocktaking of American Capitalism." Most of the characteristics of the current international scene and not a few of the salient features of our domestic situation arise from the international struggle for power and, underlying this struggle, the pervasive contest of opposing ideologies. Economists are concerned with both of these trials of strength, but with the latter more directly. For economists in America it would seem to be both their patriotic duty and their obligation as social scientists to make a concerted attempt to appraise the operation of our capitalist or private enterprise system. This theme recommended itself for the present meetings of the Association, not only because of its overriding importance, but also because judicious assessment requires the contributions of the manifold fields embraced within the broad discipline of economics. Not all of these fields are represented in the present program; indeed, it would probably be bootless to attempt a really exhaustive presentation. On the other hand, completely to exclude certain timely areas of discussion because they were not directly oriented to the main theme would also be unwise. Sessions closely oriented to the stocktaking of American capitalism begin with the evening meeting on Tuesday and extend through the general appraisal scheduled for Friday morning. Sessions less closely gauged to the central theme occupy the afternoon preceding and following these limits. Some rearrangement of the order of sessions has been made in order to bring together the papers dealing with the theoretical and applied aspects of the main topic, domestic and national.

It should hardly be necessary to reiterate that the purpose of the American Economic Association is to encourage freedom of discussion and that the Association as such does not assume any responsibility for the opinions or views expressed by those who participate in its meetings. We trust, also, that readers may take it for granted that no one but the author is responsible for the contents of his paper. Hence the disclaimer, which often appears as a footnote, to the effect that the opinions expressed do not necessarily reflect the views of the agency or institution with which the author is affiliated, is omitted in this volume.

Tuesday, December 27, 1949

9:00 A.M. *Meeting of the Executive Committee*

2:00 P.M. 1. *Problems of an Advanced Defense Economy*

Chairman: Donald H. Wallace, Princeton University

Papers: Charles J. Hitch, RAND Corporation; Bernard F. Haley, Stanford University; Richard A. Musgrave, University of Michigan; Lloyd G. Reynolds, Yale University

Discussion: William Haber, University of Michigan; Herbert Stein, Committee for Economic Development

2. *Economic Policy in Occupied Germany*

Chairman: Calvin B. Hoover, Duke University

Papers: Theodore W. Schultz, University of Chicago; Walter W. Heller, University of Minnesota; Horst Mendershausen, Federal Reserve Bank of New York

Discussion: Gerhard Colm, Council of Economic Advisers; Don D. Humphrey, Duke University; Philip M. Raup, University of Wisconsin; Heinz Sauermann, University of Chicago

4:00 P.M. 3. *Population and Resources* (Joint session with the American Statistical Association, the Population Association of America, and the American Farm Economic Association)¹

Chairman: Carter Goodrich, Columbia University

Papers: Frank Notestein, Princeton University; P. V. Cardon, U.S. Department of Agriculture

Discussion: Joseph S. Davis, Stanford University; D. Gale Johnson, University of Chicago

¹ Publication arrangements in the hands of the other associations co-operating in this session.

8:00 P.M. *What Planning and How Much Is Compatible with a Market Economy: Recent European Experience*

Chairman: Paul H. Douglas, United States Senator, Illinois

Papers: Sir Henry Clay, Oxford University; Erik Lindahl, University of Uppsala

Rapporteur: William Diebold, Jr., Council on Foreign Relations, New York City

Wednesday, December 28, 1949

10:00 A.M. 1. *U.S. Foreign Investment in Underdeveloped Areas*

Chairman: James W. Angell, Columbia University

Papers: H. W. Singer, United Nations; William A. Brown, Jr., Brookings Institution; Walter S. Salant, Council of Economic Advisers
Discussion: Leroy D. Stinebower, Department of State; B. K. Madan, International Monetary Fund; Bruno Foa, New York City

2. *Stabilizing the Economy: The Employment Act of 1946 in Operation*

Chairman: E. A. Goldenweiser, Institute for Advanced Study

Papers: Paul J. Strayer, Princeton University; George Leland Bach, Carnegie Institute of Technology; Roy Blough, University of Chicago
Discussion: Simeon E. Leland, Northwestern University; Edwin G. Nourse, Washington, D.C.

3. *Capitalism and Monopolistic Competition: I. The Theory of Oligopoly*

Chairman: Morris A. Copeland, Cornell University

Papers: George J. Stigler, Columbia University; Joe S. Bain, University of California; Tibor Scitovsky, Stanford University; William Fellner, University of California

Discussion: George J. Stigler; Joe S. Bain

12:00 M. *Luncheon Session* (Joint session with the American Finance Association)²

Chairmen: Neil Jacoby, University of California at Los Angeles; Howard S. Ellis, University of California

Address: Paul H. Douglas, United States Senator, Illinois

2:00 P.M. 1. *Capitalism and Monopolistic Competition: II. Can the American Economy Be Made More Competitive?*

Chairman: Corwin D. Edwards, Federal Trade Commission

Papers: Clair Wilcox, Swarthmore College; A. D. H. Kaplan, Brookings Institution; E. H. Chamberlin, Harvard University; J. M. Clark, Columbia University

Discussion: Clair Wilcox; E. H. Chamberlin; J. M. Clark

2. *Transportation in Capitalist and Socialized Economies*

Chairman: Sidney L. Miller, University of Pittsburgh

Papers: G. Lloyd Wilson, University of Pennsylvania; E. Grosvenor Plowman, United States Steel Corporation; Charles Dearing, Brookings Institution

Discussion: Virgil D. Cover, Syracuse University; Harold W. Torgerson, Northwestern University; I. L. Sharfman,³ University of Michigan; Hampton K. Snell, University of Texas

4:00 P.M. 3. *Capitalism and Equality of Income* (Joint session with the American Statistical Association)

Chairman: Hildegard Kneeland, Bureau of the Budget

Papers: Selma Goldsmith, U. S. Department of Commerce; Hazel Kyrk, University of Chicago; Allan G. B. Fisher, International Monetary Fund

Discussion: Abram Bergson, Columbia University; Dorothy S. Brady,⁴ University of Illinois

8:00 P.M. *Presidential Addresses* (Joint session with the American Statistical Association)

Chairman: Joseph A. Schumpeter, Harvard University

Addresses: Howard S. Ellis,⁴ American Economic Association; Simon Kuznets, American Statistical Association

² To be published in the journal of the American Finance Association.

³ No manuscript received.

⁴ Published in the March, 1950, issue of the *American Economic Review*.

Thursday, December 29, 1949

10:00 A.M. 1. *Capitalism and Economic Progress* (Joint session with the Economic History Association)

Chairman: Louis M. Hacker, Columbia University

Papers: Harold F. Williamson, Northwestern University; George W. Terborgh, Machinery and Allied Products Institute; Edgar M. Hoover, Council of Economic Advisers

Discussion: Yale Brozen, Northwestern University; David McCord Wright, University of Virginia; Ralph W. Hidy, Business History Foundation

2. *Capitalism, Economic Stability, and Primary Producers*^a (Joint session with the American Farm Economic Association)

Chairman: Theodore W. Schultz, University of Chicago

Papers: Warren C. Waite, University of Minnesota; D. Gale Johnson, University of Chicago, and O. H. Brownlee, University of Chicago

Discussion: Fred V. Waugh, Council of Economic Advisers; Harold Halcrow, Montana State College; Albert G. Hart, Columbia University

3. *Capitalism and Economic Stability: Direct Versus Monetary and Fiscal Controls*^b (Joint session with the American Finance Association)

Chairman: John K. Langum, Federal Reserve Bank of Chicago

Papers: Robert C. Turner, Indiana University; Paul W. McCracken, University of Michigan; Everett E. Hagen, University of Illinois

Discussion: William W. Tongue, Jewel Tea Company; C. Richard Youngdahl, Board of Governors of the Federal Reserve System

2:00 P.M. 1. *Tax Structure and Private Enterprise*

Chairman: Carl Shoup, Columbia University

Papers: Lawrence H. Seltzer, Wayne University; E. Gordon Keith, University of Pennsylvania; Earl R. Rolph, University of California

Discussion: O. H. Brownlee, University of Chicago; Louis Shere, Indiana University; Richard E. Slitor, U. S. Treasury

2. *Linear Models of Production and Allocation*^c (Joint session with the American Statistical Association and the Econometric Society)

Chairman: Solomon Fabricant, National Bureau of Economic Research

Papers: Nicholas Georgescu Roegen, Vanderbilt University; Tjalling C. Koopmans, Cowles Commission for Economic Research

Discussion: Wassily W. Leontief, Harvard University; George J. Stigler, Columbia University; Marshall K. Wood, Department of the Air Force

3. *Can Capitalism Dispense with Free Labor Markets?*^a (Joint session with the Industrial Relations Research Association)

Chairman: David A. McCabe, Princeton University

Papers: Clark Kerr, University of California; Joseph Shister, University of Buffalo; Kenneth E. Boulding, University of Michigan

Discussion: Paul Fisher, Dartmouth College; Charles C. Killingsworth, Michigan State College; Frank C. Pierson, Swarthmore College

5:00 P.M. *Annual Business Meeting*

8:00 P.M. *Economic Power Blocs and American Capitalism*^d (Joint session with the American Political Science Association, the American Sociological Society, and the Industrial Relations Research Association)

Chairman: J. Douglas Brown, Princeton University

Papers: Herbert Blumer, University of Chicago, Department of Sociology; Merle Fainsod, Harvard University, Department of Government;

Joseph J. Spengler, Duke University, Department of Economics

Discussion: Don Price, Public Administration Clearing House; Hans Speier, RAND Corporation; Neil W. Chamberlain, Yale University

^aTo be published in the journal of the American Farm Economic Association.

^bDiscussion papers not published in this volume but will appear along with the main papers in the *Proceedings* of the Industrial Relations Research Association.

^cOnly the paper by J. J. Spengler and the discussion by N. W. Chamberlain are published in this volume. Papers for the complete session will be published in the *Proceedings* of the Industrial Relations Research Association.

Friday, December 30, 1949

- 10:00 A.M. *American Capitalism: Where Are We Going?*
Chairman: Frank H. Knight, University of Chicago
Papers: B. S. Keirstead, McGill University; Joseph A. Schumpeter, Harvard University; Sumner H. Slichter, Harvard University
Rapporteur: Maxwell Obst, Council on Foreign Relations, New York City
- 12:30 P.M. *Luncheon Meeting of the Executive Committee*
- 2:00 P.M. 1. *Round Table on the Teaching of Elementary Economics*^a
Chairman: Horace Taylor, Columbia University
Papers: William W. Hewett, University of Cincinnati; Morris E. Garnsey, University of Colorado, and Clay P. Mallick, University of Colorado
Discussion: Harry Schwartz, Syracuse University; Carroll R. Daugherty, Northwestern University
- 2:30 P.M. 2. *Urban Planning*^b (Joint session with the American Political Science Association)
Chairman: Coleman Woodbury, Urban Redevelopment Study
Papers: Hugh R. Pomeroy, Westchester County (New York) Planning Department; Victor Roterus, U.S. Department of Commerce
Discussion: Robert B. Mitchell, Columbia University; C. S. Logsdon, University of North Carolina; Charles S. Ascher, Brooklyn College; Lloyd Rodwin, Massachusetts Institute of Technology

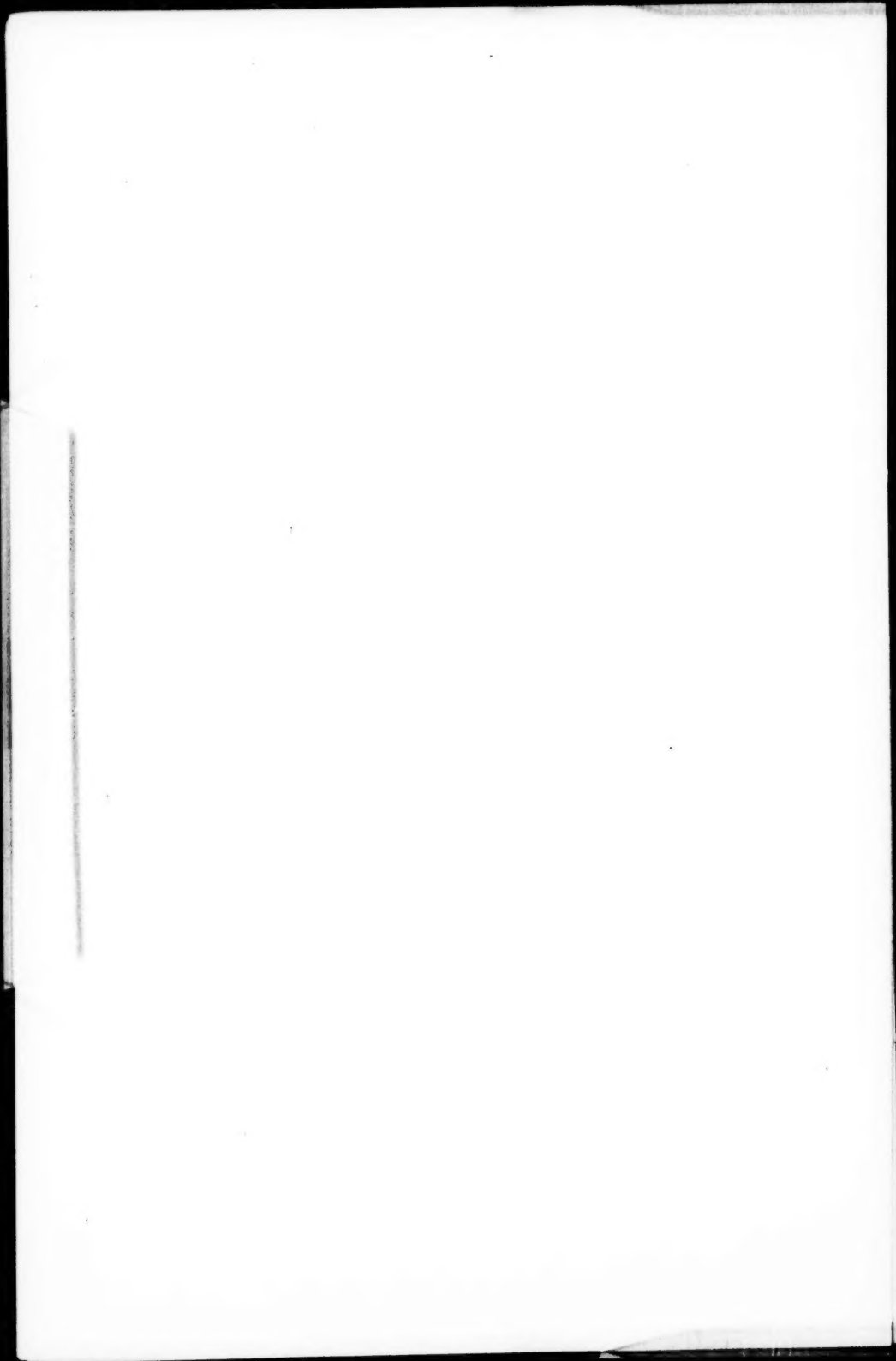
^a To be published as part of the Report of the Committee on the Teaching of Economics and the Training of Economists which is scheduled to appear as a supplement to an early number of the *American Economic Review*.

^b Publication arrangements are in the hands of the American Political Science Association.

Note: The Transportation and Public Utilities Group and the Temporary Committee on Latin America held luncheon and breakfast sessions, respectively, December 29, which were not an integral part of the program. Burton N. Behling's paper, "Federal Regulation of the Natural Gas Industry," was published in the *American Gas Journal*, February, March, 1950. We have not learned of publication outlets for "Some Economic Objectives of Public Utility Regulation," by C. Emery Troxel, nor "Latin America and the Industrial Revolution," by Elgin Williams.—Editor.

THE purpose of the American Economic Association, according to its charter, is the encouragement of economic research, the issue of publications on economic subjects, and the encouragement of perfect freedom of economic discussion. The Association as such takes no partisan attitude, nor does it commit its members to any position on practical economic questions. It is the organ of no party, sect, or institution. Persons of all shades of economic opinion are found among its members, and widely different issues are given a hearing in its annual meetings and through its publications. The Association, therefore, assumes no responsibility for the opinions expressed by those who participate in its meetings.

JAMES WASHINGTON BELL
Secretary



WHAT PLANNING AND HOW MUCH IS COMPATIBLE WITH A MARKET ECONOMY: RECENT EUROPEAN EXPERIENCE

PLANNING AND MARKET ECONOMY: RECENT BRITISH EXPERIENCE

By SIR HENRY CLAY
Oxford University

In the present context "planning" is used in a special sense as the opposite of reliance on a "market economy"; it implies specific action by government to substitute an authoritarian determination for the normal direction of resources and distribution of product by the movement of prices in a market. The main thesis I wish to put forward is that it was no part of the policy of the British Government, which took office after the war, to displace or interfere permanently with the functioning of the market economy, but that it has been driven, partly by the logic of its own policy and partly by developments outside its control, to extend its interferences further and to give them forms that are not merely temporary.

This government found itself faced with three tasks: the turnover of the economy from war to peace, the completion of the provision by Social Services for the risks of poverty, and its specifically socialist task of nationalizing certain industries and services. Now none of these involved the permanent supersession of the market as the chief organizing agent in the economy, and none of them, so far as I can judge, was intended to supersede the market; on the contrary, I shall suggest, the government showed a dangerous degree of reliance on markets to continue functioning.

The turnover from war to peace was intended to be a controlled operation. The government sought to avoid the unemployment and the sudden rise in prices which marked the same transition from war to peace in 1919; accordingly it retained the controls over consumption and investment, over prices and incomes, which had been elaborated for war purposes. But this was thought of as a temporary policy and defended as necessary only so long as shortages made it dangerous to free prices and markets. There was little difference between the parties on this. Nor was there in principle over the welfare legislation; most of it had been outlined and some of it enacted under the coalition government. It was not revolutionary in intent; it sought only to impose conditions on the working of private enterprise, not to supersede it; to supplement it by state-subsidized insurance or free services, while

leaving it to work for the market and direct its activities in response to market demands. Equally the policy of nationalization was not thought of as superseding the market. The government was concerned to demonstrate that it was not bringing industry under the same kind of government control as is exercised by the ordinary departments which carry out the regulative activities of government. It is clear that it assumed, rather naïvely, that this end could be attained simply by entrusting each of the nationalized industries and services to a statutory board or commission, which would have the same relation with labor on the one hand and with the market for its product on the other as the privately-owned concerns which it replaced; essentially the change proposed was the substitution of the government for private stockholders as the owner of the enterprise. Let us ask how far these anticipations were disappointed.

During the war the needs of war provided an alternative criterion to that offered by the market, by reference to which resources and supplies could be allocated. After the war shortage was the ground for continuing the system of allocation. The method was the same: estimates were made of supplies likely to be available and of requirements; prices were fixed, and demand restricted to estimated supplies by allocation or rationing. In this way it was sought to ensure that such food supplies as were available should be distributed in accordance with need instead of power to pay, and that industrial and building materials in short supply should be allocated for purposes given priority in accordance with the government's conception of relative urgency, not the market's. As and when supplies increased and freedom to purchase could be restored without the risk of a sharp rise in prices, rationing and allocation could be withdrawn, as they have been in the case of clothing and of many industrial supplies.

The policy has not been as simple to carry out as to summarize. As supplies have increased, it has not always followed that rationing or allocation was suspended. The government waited for supplies to increase until free demand would not force up prices; but the fixed prices always tended to lag behind the capacity of purchasers to pay and the rise in prices generally, so that the removal of control would always have involved a rise in prices. A control which wishes to remove rationing must experiment with putting up its prices, until it finds the price at which the public will not take more than the ration; and controls do not like experiment.

It should be remembered that government policy since the war has been continuously influenced by two fears: the fear of an inflationary rise in prices and the fear of unemployment. As cost of supplies rose, the government was unwilling to allow food and other prices to rise cor-

respondingly, lest demands for wage advances should be pressed. To keep down prices, and therefore wages, the wartime system of subsidies was continued and extended, and today they are running at about twice the wartime level. In the main these subsidies represent the trading losses of the Ministry of Food's operations; the Ministry pays what price it must to secure supplies; being relieved of the necessity of covering its costs out of its receipts, it sells at prices fixed arbitrarily, often in relation to conditions that no longer obtain. The consumer buys, not what he would choose if he had to pay the true cost, but what he chooses at the price (less than the cost) which the Ministry thinks he ought to pay. The rich are subsidized equally with the poor; no one is deterred by price from consuming what he can get of short supplies, or encouraged by low prices to shift his consumption to other supplies. These are perhaps transient difficulties; more serious is the danger that the country may slip into a position over food analogous to that which has resulted from a generation of rent control and subsidies in housing—that no one expects, or is expected, to pay in rent more than half the cost (interest and amortization) of the house he occupies. It would have been quite possible to maintain rationing—the essential safeguard against maldistribution—while allowing food prices to rise with the cost of supplies.

The market criterion being discarded, an alternative was sought in a better distribution of food in accordance with physiological need. Rations are equal, except for provision for heavy workers and other special needs; prices are kept down (while, by other means, lower incomes kept up) to a level at which everyone can afford to take up his ration. The result is a redistribution at the expense of the middle and richer classes to the benefit of the lower-income groups—a social reform with much to commend it, but not in any way a temporary or transitional measure.

Because the control of prices and distribution was a continuation of the wartime arrangement and thought of as temporary, the actual business of distribution and manufacture was usually left to the firms constituting the prewar market. As a temporary arrangement, this saved trouble and avoided the invidious task of discrimination. For rationed foodstuffs, the consumer was allowed at intervals to change his supplier; for rationed clothing the consumer was free to go to any supplier at any time; but in the case of industrial materials each firm was normally given the same proportion of the total supply as it enjoyed before the war. The longer this basis of allocation lasted the less satisfactory it became. Shares were modified, but no alternative basis which was not arbitrary could be devised. The system made it difficult to fit in newcomers, though this again had to be done, again

necessarily rather arbitrarily. Prices and margins were also based originally on prewar experience, but modified much more quickly. They were probably extravagant as a whole, since they were set to cover the costs of the marginal firm instead of allowing the more efficient to capture his trade. The whole system tended to encourage and habituate traders to joint action over prices and distribution. The handling of coupons and filling in of returns—with much depleted staffs—was a hardship; but it is probable that the controls were more popular with the traders than with the government officials who enforced them, and the progress there has been in liquidating them is due at least as much to the latter.

The controls discussed so far concerned only the domestic distribution of foods. The government inherited from the war a more difficult task—the adjustment of the country's external relations—and again has dealt with it by continuing the temporary wartime system of control. The government was slow to recognize the urgency and difficulty of its problem; this at least is the only inference to be drawn from its concentration on the organization of the International Monetary Fund (which can function only when the member countries' payments are in normal equilibrium), its acceptance of the condition of sterling transferability and convertibility in the Agreement of December, 1945, governing the American credit (which equally would be practicable only when the country's payments had recovered equilibrium), its dissipation of over 1,000 million pounds of reserves by gifts and loans, and generally its preoccupation with domestic reorganization and reform. The deficit on Current Account in 1947 (estimated at 630 million pounds) and the even greater gold and dollar deficit (1,024 million pounds) startled the country into awareness.

War expanded the country's requirements from overseas and reduced its capacity to pay for them by exports. The gap has persisted and has been bridged similarly by Canadian and United States credits, enormous drafts on gold and gold currency reserves, and Marshall Plan aid. The negative device employed in war of restricting imports by import licensing has been retained; so has the supplementary control of other payments (outside the Sterling Area) by requiring an Exchange Control license. But in spite of a reduction of imports by an eighth in volume, the problem persists. It is not (at the moment—no one can say what the position will be when the present sellers' market in the world disappears) a problem of balancing total payments and total receipts; the United Kingdom attained an over-all balance in its external payments in the latter half of 1948. The difficulty is to pay for supplies from North America, which it can no longer finance by applying to them its surplus with other countries, since the other countries are also laboring under dollar deficits.

The policy adopted has been to increase exports and to divert exports to North America. Unfortunately the government does not exercise the totalitarian control over the direction of the country's trade which is often assumed or expected. At first it could influence the direction by giving preference in the allocation of government factory premises (the only new building available) and of building labor and materials to export industries; and, so long as it controlled raw materials, in the allocation of these. Today it may accept responsibility for the nationalized coal industry, which is exporting 70 per cent less than before the war; but the expansion of exports generally to 70 per cent more than before the war is attributable to the enterprise of private industry. Private industry has naturally followed accustomed channels and, in a time when it cannot meet all demands on it, sought to satisfy old customers first. Thus the expansion of exports as a whole has not solved the problem of paying for American supplies.

I turn to an example of the fear of unemployment. Short-term unemployment on demobilization was avoided by the government's courageous refusal, in spite of great pressure, to release men from the forces any faster than the carefully prepared plan of demobilization prescribed, thus avoiding the mistake made in 1918-19. But a more deep-seated fear was the recurrence of persistent unemployment when demobilization was complete. This helps to explain the refusal to consider any measure that might even be represented as deflationary.

A more specific policy is offered by the control of the location of industry. The government was able to direct about three-quarters of the new industrial development of the first three postwar years to the areas of exceptional unemployment. This was done in the interest of diversification of industry, since the study of interwar unemployment had related the difficulties of these areas to their dependence on one or a limited range of industries. But this policy necessarily, if it was successful, diverted labor from the industries on which the areas had been too dependent between the wars; and it happened that these industries—coal, textiles, iron and steel, shipbuilding—were the industries which it was most important to expand rapidly in order to take advantage of the world's demand for exports. Thus the government's long-term policy co-operated with the reluctance of workers to enter these industries to hamper the government's policy of rapidly expanding exports.

The planned location of industry as a long-term policy was embodied in the Town and Country Planning Act of 1947. The effects of this have still to be felt; so far the government's influence has been exercised through the Board of Trade's power to require a license for any new industrial building—a power conferred on it with the purpose of rationing scarce building resources, not of planning long-term development. Under this Act anyone in the future who wishes to make any material

change in the use of a piece of land or a building (agricultural uses are excepted) must first obtain the permission of a planning authority; if the use is industrial, he must also get the permission of the Board of Trade; he must not undertake any proposed development or change of land use until the Central Land Board has fixed the amount of development charge which must be paid, which will be 100 per cent of the estimated increase in value from the change of use, and has secured payment. Finally, every county and county borough council, as the local planning authority, was required to produce within three years for approval by the Minister a development plan, defining "with such degree of particularity as may be appropriate," the sites and areas for different uses—a process to be repeated every five years. Such requirements hardly encourage and facilitate the new enterprise, the re-orientation of industry, which are the great need of a country in the position which war, for the second time in a generation, has left England. They have an interest also for economists as a curious reversal of aims in economic policy. Henry George argued reasonably, even if the practicability of his proposals is open to question, that the owners of land would have an inducement to put it to its most economic use if land values were taxed; the basis of this new English law is that no tax is incurred so long as the owner undertakes no development or change of use of his land, but a tax of 100 per cent of the increased value is incurred if he undertakes the trouble and risk of putting it to a more economic use—an exact inversion of Henry George's proposal.

Little need be said about the program of welfare legislation. In principle it involves no interference with the direction of industry by market demand; whether it does so in practice is a matter of degree. It is here that the government's reliance on the market to continue functioning through any change seems to me to have been overoptimistic. It has been the aim of welfare legislation to meet all the risks of wage-earning employment, including the risk of unemployment. It is not yet certain that, when that risk is removed, labor will retain the mobility needed if the redirection of industry, especially into production for export, called for by the changed situation of the country, is to be achieved. It becomes highly improbable if no movement of wages is permitted (except a gradual and uniform upward drift). The same question arises when the cost of the welfare provision is brought into account. Enterprise also has to be redirected—new methods, new processes, new products, new markets are all urgently needed. But these all involve capital expenditure, and the main source on which industry is accustomed to draw for capital for new development—its own undistributed profits—is depleted by the high taxation levied under the English system of taxation on trading profits.

Nationalization would similarly, in principle and intention, involve no interference with markets. An exception must be made in respect of the function of nationalized trading, by government purchase and distribution of goods at the wholesale stage. This was a continuation of war practice and might have been regarded as a temporary measure were it not for one incident of it. The government's action—it purchases four-fifths of the country's food imports and about half its raw material imports—has involved the suspension of most of the international commodity markets, a prominent feature of Britain's free trade economy, which were still active in 1939. If the suspension continues much longer, it may be difficult to revive them. Steps have been taken to revive the markets for wool and nonferrous metals; but the cotton market has been liquidated by the transfer, as a permanent measure, of all cotton importing to a government commission. The avowed motive of this was the old left-wing political belief that the cotton futures market was a cause, not an outcome, of fluctuations in cotton prices, and that such fluctuations could be eliminated by centralized planned purchase and distribution. The experience of the commission has been that it was bound to follow, not lead, world prices, with the result that the changes in cotton prices have been much bigger, if less frequent, than under the old free marketing system.

To come back to the nationalized industries in the common use of the term: the chief lesson so far of English experience has been to point the difficulty of excluding the government from participation in the commercial and investment decisions of the boards to which the running of the industries has been entrusted. There is no doubt that the government was genuinely concerned to preserve the independence of the boards; common prudence would dictate that attitude, since the boards are the government's only protection when awkward questions of wage demands and price changes arise. When members of Parliament first began to put detailed questions, the Speaker took the view that, since the minister questioned was not responsible for the administration of the enterprise, he could not be required to answer, and disallowed a number of questions. But Parliament has its rights, which the Leader of the House, Mr. Herbert Morrison, a loyal and experienced parliamentarian, recognized.

The difficulty is inherent in nationalization. The industries concerned are of great social importance; nationalization has deprived the consumer of such protection as competition, actual or potential, offers; and the member of Parliament wonders why, if Parliament was to be excluded from any say in the affairs of the industries, they were ever brought within the field of direct government responsibility. The difficulty arose, and was not solved, in the drafting of the bills by which

nationalization was effected. They all include a clause, reserving the right of the minister concerned to interfere, in terms substantially the same as the following taken from the Coal Industry Nationalization Act: "(1) The Minister may, after consultation with the Board, give to the Board directions of a general character as to the exercise and performance by the Board of their functions in relation to matters appearing to the Minister to affect the national interest, and the Board shall give effect to any such directions." But there is no explanation of the scope of "general." Further, where it is appropriate, another clause corresponding with another coal clause is included: "(2) In framing programmes of reorganisation or development involving substantial outlay on capital account, the Board shall act on lines settled from time to time with the approval of the Minister." Yet the boards are responsible for the commercial success of their undertaking; they are required to conduct them in such a way that, on an average of years, their receipts from sales and charges will balance all outgoings properly chargeable to revenue, unless, as in the case of civil aviation, Parliament has decided that the service is a proper object of subsidy.

The resulting difficulties are appearing in the case of coal and the railways. Questions were asked in Parliament about the recent increase in prices of certain grades of export coal. The Minister replied that the Board was free to fix its prices "on commercial considerations, in the same way as any other exporter." But internal prices are not raised without the Minister's permission and, in a recent revision, at the Minister's request, no change was made in the price of house coals. The Minister's explanation was that, while the Board is the arbiter of prices, when it came into existence it continued a voluntary agreement which had been made between the mine-owners and the Minister of Fuel not to increase prices without the latter's consent. This answer at best defers a decision on the question of responsibility, and immediately does nothing to satisfy Parliament on two issues raised by the Board's prices: first, that this price discrimination has attracted the unfavorable comment of the administrators of Marshall Aid, not to speak of the European countries which pay the higher prices; and, secondly, that the whole of the nationalized industry's profits are attributable to its differential export prices. It is not clear how any constitutional arrangement can relieve the government of the responsibility for actions of nationalized industries which have important political effects either at home or, even more important, abroad.

The railways raise the same problem. The government will be held to have some responsibility for any increase in the cost of transport. No constitutional device will prevent the electorate from looking to the government for a remedy; in the long run the most likely outcome is

some system of subsidy. Certainly the problem of fixing prices and charges of government-owned enterprises was not settled by including in the acts nationalizing them a provision requiring them to pay their way. In a democracy it is virtually impossible that a government's relations to the market should be the same as a private trader's.

One or two conclusions may be drawn from this survey.

The combination of the wartime controls of food and scarce materials and the wartime restrictions on freedom to purchase imported goods was unavoidable. It is, however, one thing to direct an organization which has grown up in response to needs expressed through the market to disregard market indications for a time and accept government instructions instead; and it is an entirely different thing to substitute an authoritarian determination of wants to priorities permanently. The latter involves the formulation of criteria in place of the spontaneous decisions of a market. Question-begging generalities about social need and national urgency do not suffice, because they are neither universally accepted nor measurable. Planning in detail would seem to require a one-party system, since the lack of unanimity, if allowed to express itself, would sap the foundations of planning.

Even if this difficulty of defining aims could be overcome, the administrative difficulties remain. Policy—which differs from planning in making no claim to control events—proceeds by a few broad measures aimed at influencing the general conditions under which industry and markets function; even within these limits governments find it difficult to secure consistency. Planning, going into more detail, has a more detailed problem of co-ordination. In carrying it out, the planning authority is faced with two obstacles—in English-speaking countries—responsible government and the tradition of personal liberty. On the one hand economic administration is impossible if every act and decision of the administrator is liable to be challenged; no plan can provide beforehand for every concatenation of circumstances with which he is faced, and he must be left to deal with them in the light of the actual circumstances, not the circumstances provided for in the more or less distant past by the planner. On the other, a representative assembly is not likely to tolerate without question acts and decisions done on its authority and in its name. No distinction must be made between sovereign and equal electors; yet discrimination to suit the infinitely varying requirements of different customers is the essence of good economic administration.

Again, the plan often requires a disposition of resources to which the free citizen does not conform—more labor in coal and export industry, less in the amusement and other home market trades. If the government directs labor compulsorily, it curtails personal liberty; if it

allows wage differentials to provide the necessary incentive, it is surrendering control to the market again and losing control of prices.

The dependence of planning on administrative and constitutional arrangements is fundamental. The elaboration of plans, the co-ordination of sectional programs, the application, inspection, and enforcement of planned allocations and prices, the collection and analysis of innumerable forms involved in the futile attempt to maintain consistency and avoid discrimination, the machinery for negotiation, cajolery, and coercion—all together create a growing class of government employees who will exercise an administrative discretion in the exercise of their functions which was denied to the old-fashioned civil servant. At some point it must become impossible for Parliament, with its limited resources of time and ability, to retain any sort of effective supervision of, and responsibility for, the economic Frankenstein it has created; at that point the administrative requirements will have involved a constitutional revolution which was no part of the plan.

SWEDISH EXPERIENCES IN ECONOMIC PLANNING

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Sweden and the United States are essentially alike in the basic political structure of society. As in the United States, the sense of democracy and individual freedom is deep-anchored in Sweden and the other Scandinavian countries.

But the social development in Sweden and in many other European countries has gone further than in the United States. The consolidation of the labor class has evolved with resulting increase in power. For two decades the labor party has controlled the majority in the Swedish parliament and therefore the government. The trade unions—the core of the party—are unified in a strong organization that is a mighty mouth-piece for the interests of labor. Politically independent but mainly supported by labor, the co-operative movement has been very successful under intelligent leadership. Measured by yearly turnover, the Co-operative's central firm is the largest in Sweden. It also has accumulated large funds which, when deemed desirable, are used for establishing firms with express purpose of competing with private monopolies in different branches of production. The mere existence of this mighty co-operative firm, which has won several conspicuous victories, has an obviously mitigating influence on tendencies toward monopolistic price setting.

These groups, representing the interests of labor, are, however, not all-embracing. On the other hand, we have a well-organized farmers party, strong associations of bankers, manufacturers, and traders. Also conservative are the military and civilian groups, including the university professors. The government consults the top men in these and other organizations on all important issues. I have mentioned this only to illustrate that the nonlabor interests have great possibilities in exercising their influence and preserving their interests. Thus there is a real balance of power. But the center of gravity lies in Sweden as in the other Scandinavian countries a little more to the left than, for example, here in the States.

The primary objective of the Swedish economic policy—a natural outgrowth of these political and social conditions—has been an attempt to maximize the total real income of the lower income classes. Of course the dominating labor party has embraced this program. But the other more bourgeois parties can raise no severe objections, since they also are dependent on the votes of relatively poor people.

In pursuing this given objective, the Swedish government has so far

refrained from socialization of productive equipment. It is true that in Sweden public utilities, such as postal and telegraph services, railways, electricity, gas, water, etc., are owned by the state or municipalities. But this ownership always has been the case and a change has never been suggested. We have some big state monopolies—tobacco and liquor distribution—but they were introduced more than thirty years ago by conservative governments as instruments of taxation. They have proved to be very effective in extracting money from the broad masses of the population. Other schemes of socialization have, of course, been discussed in Sweden during the last decade, but, with the exception of the construction of a new iron works in the north, they have not materialized. The public sector of the Swedish economy is therefore now probably not greater than that of the United States, if production for defense purposes is included.

The Swedish policy for improving the standard of living for the great bulk of the population has thus on the whole been limited to certain measures undertaken within the present framework of free enterprise and private property. These measures can be divided into two groups: (1) those that have a more even distribution of income in view and (2) those that aim at an increase of total income through elimination of unemployment and rational organization of production and trade.

With regard to the first and more radical part of the Swedish program, I shall limit myself to some few comments. I think that Sweden under the leadership of its powerful and intelligent Minister of Finance, Ernst Wigforss, from the beginning of the thirties until now has gone farther on the way of the so-called "redistributive" public finance than has any other country, including England. The progressive tax rates on income and capital have successively been raised to such a level that the Swedish millionaires, if they will not consume their capital, must be satisfied with rather modest conditions of living. On the other hand, extensive social benefits, such as free education, cheap medical care, low-cost housing projects and old age pensions, have been highly appreciated by the great majority of the population, including the middle class. The total amount of income transferred in such a way (through the combination of progressive taxes and social benefits) can, however, not be very large in a country where the level of taxation for general purposes, including military expenses, is relatively high. (After a rough calculation, the actual transfer from higher to lower income groups is limited to about 10 per cent of the total income.) The most important effects of such a redistributive policy are therefore perhaps of a psychological nature. The antagonism between capital and labor has so far diminished that the so-called "exploitation" of labor by capital in individual instances has been compensated by an exploitation of capital

by labor through its power to influence legislation concerning taxation and social reform. Since the laborers and other low-income groups now realize that virtually no more money can be squeezed from the income of the capital-owners, they must draw the conclusion that a further improvement of their economic conditions is dependent on the increase of the total income of the country. They therefore feel responsibility for a strengthening of the incentives to work, save, and invest, which undoubtedly also implies a definite limitation of the redistributive program. A reduction of the present high marginal rates of the direct taxes on income and capital and special tax reliefs for savings seem from that point of view to be advisable. The viability of the "mixed economy" we have now in Sweden is, according to my judgment, dependent on the development of a feeling of solidarity among the different groups in the society, not only between labor and capital, but also among different labor groups—agricultural versus industrial, unskilled versus skilled labor, manual labor versus the "white-collar" worker. They must all realize that their interests in the long run are tied to a common goal: the maximization of the national dividend which they share together.

I now turn to that part of the Swedish economic policy which is based on planning for an increase in the total national dividend. The most interesting part of that planning refers to the providing of a monetary and fiscal policy of such a nature that the actions of private producers and consumers within this framework can be expected to reach a full utilization of the nation's resources at a fairly stable price level.

The problem of how to achieve this aim can be approached either from the monetary or from the employment angle. For my own part, I find the former, more old-fashioned approach most appropriate for didactic purposes. Moreover, in the formulation of the monetary problem, i.e., stabilizing the price level, I adhere to an old Swedish tradition, based on the contribution of Knut Wicksell fifty years ago and in agreement with that part of Keynesian thought that is embodied in the *Treatise of Money*. (In Sweden we consider this book a good general approach to the dynamic problem and more valuable than *The General Theory*, which is based upon more specific assumptions.) According to this tradition, the general price movements, referring to both factors and products, are of two kinds: (1) induced price movements, caused by a divergence between planned saving and planned investment and (2) autonomous or spontaneous price movements brought about by other more exogenous causes.

Price fluctuations caused by changes in productive efficiency are not included in these two categories, insofar as they are kept within the limits set by these changes. I cannot enter here into a discussion of whether or not such price changes should be counteracted. It is sufficient

for me to make two assumptions which seem to be legitimate not only with regard to Sweden but also with regard to other countries. These assumptions are: (1) that it is desirable to reduce as much as possible the so-called "induced" price movements and (2) that the other autonomous price movements should be controlled.

The realization of the first objective does not imply exact equality between the total amounts of saving and investment (including also capital export abroad) that is planned in advance for a certain period. It presupposes, however, that these two magnitudes should have such a relation to one another that the resulting gains and losses of the entrepreneurs should, for society as a whole, have neither expansive nor contractive effects, or, quoting Keynes, who acknowledges the similarity of his position with that of Wicksell, that the remuneration of the entrepreneurs should be "normal" in the sense that "if they were open to make new bargains with all the factors of production at the current prevailing rates of earnings, it would leave them under no motive either to increase or to decrease their scale of operations."¹

We arrive at an interesting theoretical problem to disentangle. How should this balance between total saving and investment *ex ante* and the corresponding balance between gains and losses for the entrepreneurs be made up under different assumptions with regard to the expectations of the entrepreneurs and their attitude to the uncertainty factor in order to establish a real "monetary equilibrium"? I must, however, limit myself to the statement that the entrepreneurs, if they have a pessimistic view of the future, should be encouraged by an excess of gains over losses occasioned by a corresponding excess of planned investment over planned saving—and vice versa.

Can such a program be realized only through automatic reactions of the monetary and fiscal authorities, in accordance with certain determined rules, as has recently been proposed here in the United States, or does it presuppose discretionary actions, based on planning for the future?

For my own part, I sympathize with the idea of limiting the discretionary power of the monetary and fiscal authorities as regards the objective of the policy. If, for example, these authorities in the United States could be legally obliged to do their utmost to keep the value of the dollar relatively stable—varying only between some narrow limits determined by reference to a certain price index—how great then would be the gain in security felt by persons making investments or entering into agreements for the future! But, concerning the means for realizing such a given objective, the authorities should, in my opinion, have as free a hand as possible. Otherwise, according to my own judgment and

¹ *Treatise*, I, p. 125.

experience, they would not be able to fulfill their duty. Since a monetary equilibrium is defined as a certain compatibility between all the plans which are supposed to direct the activity of investors and consumers during a certain period forward, the authority has to make an investigation regarding these plans at the beginning of the period and, if a deviation from the equilibrium seems likely, apply measures to correct the plans so the equilibrium is restored. In such a way, the tendency for instability in the price level is counteracted before it is realized. If the action is delayed until the price level has already begun a marked movement upwards or downwards with its cumulative effects, then more vigorous measures must be undertaken for stopping the movement and we get the cyclical fluctuations, which become a favorite subject of study to the delight of so many of us academic economists but which have less favorable effect on the welfare of society. The same reasoning can be applied to the employment question. Why wait for a substantial rise in the percentage of the unemployed if it is possible to apply counteracting measures at a stage early enough to prevent the rise?

My conclusion is therefore that rather intensive planning, connected with a large amount of discretionary power for the responsible authorities, is a necessary condition for a rational policy in this field. I also think that the form this planning has taken in Sweden as in the other Scandinavian countries—the construction of so-called “national budgets” for the coming year—is a definite step forward, even if the policy in itself has been far from perfect.

A national budget represents a prognosis of and a policy for the economic development in a country during a coming year. It can therefore be characterized both as a program for the government and as a motivation of that program, showing its foundations and its expected consequences in various respects. If certain objectives are set for the governmental policy—for example, a stable price level and full employment—the national budget should answer the question of how these claims are to be realized.

There are different stages in the development of a national budget for a coming year. First we have the technical work of economic experts. Starting with the national accounting system available for the past year, they have to calculate the probable development under alternative assumptions regarding the governmental policy. The next stage is the evaluation by the responsible public authorities of these alternative developments from a political point of view and the choice of one of them as the basis for the governmental policy. This chosen alternative with programmatic purport represents the national budget.

In Sweden the basic expert work is performed by the Economic Research Institute (*Konjunkturinstitutet*) which is a state institution,

within the finance department, but which has a relatively independent position. The head of the Institute is a prominent economist, Professor Erik Lundberg, who on several occasions has publicly criticized the policy which was adopted. Thus far we have happily escaped the danger of a political bias in favor of the government in the forecasting activity.

The forecasting activity of the economic experts is not merely a simple extrapolation of the given time series, but is actually performed by application of our *ex ante-ex post* techniques. This method implies, as you know, that the development during a certain period is calculated or explained with the help of what is known regarding the planning of the economic units at the beginning of the period. The most important task of the experts has thus been to make a national diagnosis of all the plans that the economic units intend to put into operation during the coming year. If according to this investigation the total planned demand for goods and services exceeds the total planned supply or, what amounts to the same, if the total planned investment exceeds the total planned saving, then the difference between these two sums, insofar as it is not compatible with a monetary equilibrium, can be characterized as an "inflationary gap." (So far in Sweden we have had no experience of a "deflationary gap," representing an excess of planned supply over planned demand.) If this gap is not filled through a correction of the plans—whereby the government can partly change its own demand and supply quantities and can partly influence the planning of the private economic units—the resulting development will be of the inflationary type thus leading to a rising price level, if it is not counteracted by increased imports or diminished stocks or prevented by price control.

During the few years national budgeting has been applied in Sweden the interest of the experts has been concentrated upon the size of the potential inflationary gap existing at the beginning of each year. A detailed and complete prognosis of the development resulting from such gaps has in general not been undertaken, since these alternatives do not represent a rational policy and therefore are not politically significant. Instead other alternatives, implying an elimination of the gap, are investigated and presented to the government.

Regarding the technical procedure to calculate the gap, I will only mention that the gathering and combination of the plans in some cases refer to real plans reported, for example, by public agencies and industrial firms and in other cases to imaginary plans which the experts construct on the basis of what seems to be the probable development of production and income at the existing price level. Two or three alternatives are presented, corresponding to different assumptions as to productivity, terms of trade, income development, etc. The tech-

nique can of course be infinitely improved.

For example, in the fall of 1946 the Institute by means of gap calculation predicted an import surplus of 2,000 million crowns for 1947, if counteracting measures were not undertaken; the actual figure was 1,980 million crowns.

The national budget is, as I have said before, one of the many possible alternative forecasts that the government chooses as a program of action. If it is especially difficult to foresee whether the development during the coming year will be of expansive or contractive character—and the present situation can serve as an illustration—then the government is in a great dilemma, as a choice between an optimistic and a pessimistic budget must be pure guesswork. A more rational procedure in such a case is to construct two national budgets—one for the expansive and one for the contractive alternative—and to let the application of these two budgets be dependent on the actual course of events. The Swedish budgetary system makes this possible. The parliament, along with the ordinary budget of the state, also can grant an emergency budget to be set into operation if special conditions make it imperative; e.g., if a tendency to increased unemployment must be counteracted.

Regarding the means used by the public authorities to close an inflationary gap and to establish monetary equilibrium, Sweden, as most other countries, has refrained from changing the interest rate and instead has resorted to financial measures (overbalancing of the budget), to credit restrictions (making agreements with the private banks and raising the requirements on their cash reserves), and to direct limitation of the investments. In this last respect, the building of houses is allowed only after permission has been obtained from the public authorities. The government thus, by varying the number of building permits, can directly control the most important segment of the investment in the country. This is, of course, a very effective weapon in combating inflationary as well as deflationary tendencies.

I have now dealt briefly with the planning necessary to the establishment of a monetary equilibrium. Even if this part of the policy were successfully administered, essential changes in the price level could occur with various undesirable consequences. Suppose, for example, that the trade unions succeed in carrying through a substantial increase in the wage level and that the producers immediately raise the prices of their products in corresponding degree. If, then, the farmers and other groups in the society also manage to achieve a rise in their incomes as compensation for the increased cost of living, a new monetary equilibrium can be reached at a higher level than the initial one. More cash and also greater credits will, of course, be needed in the new situation, but if the banking system is regulated according to the

principle of preserving a monetary equilibrium, these monetary needs will automatically be satisfied.

As a matter of fact, the value of the currency because of such autonomous or spontaneous price movements can vary in arbitrary degree. Our present monetary system has thus an inherent instability which can be regarded as a characteristic feature in comparison with the previously existing more automatic systems. Since the various groups in society always are pressing for improvement in their conditions, there is undoubtedly a chance for successive deterioration of the value of money in the long run.

Both economists and politicians have, of course, been aware of this tendency, but many of them seem to think that a successively rising price level after all is not so bad a thing. How otherwise can one explain that the government here in the United States has not prevented the price level from going up by more than 30 per cent since the end of the war when the increase in productivity and the diminished scarcity of goods instead should have been a good motive for a recession in prices? Also in Sweden, and in other countries which have followed the same course, there seems to have been a tacit approval of such a policy of following the line of least resistance. A successively rising price level has undoubtedly many advantageous effects. It facilitates the maintaining of relatively full employment, it reduces the pressure of the public debt, and therewith also the tax burden, etc. I can well understand that many persons find these advantages so important that they more than compensate for the injustice incurred to all persons suffering losses because of the falling value of money.

Personally, however, I am a strong opponent of such a policy, not so much because I undervalue its advantages, but because I find it too Machiavellian. A program of a continuously rising price level can be successfully pursued only if the responsible authorities keep it secret and instead give the public the impression that they, in principle, are following another program—for example, of maintaining a stable value of the monetary unit. In a democratic country with a highly developed educational system and a free press, it is not possible to hoodwink the public "all of the time." The truth will out. And as soon as the general public anticipates a more or less continuous rise in prices and governs its actions accordingly, the program will break down.

Therefore, it seems to me to be an important task for the public planners to elaborate some schemes for controlling the autonomous price and wage movements. In Sweden it is not politically possible to counteract a general rise in the wage level through such monetary or fiscal measures that lead to substantial unemployment. We have tried another way—that of mutual agreements between the organizations of laborers,

farmers, employees, etc., on the one hand and the public authorities on the other. Each group promises thereby not to undertake actions that are detrimental to a stabilization of the monetary value during the coming year, under the condition that the other groups behave in the same manner and that a rational policy is adopted by the public authorities. The basis for such an arrangement is a general understanding of the fact that no group in the society can make a permanent gain through changes in the value of the monetary unit.

I have now given a little orientation regarding Swedish planning in a field where I think planning by public authorities is not only compatible with but necessary for the efficient functioning of a market economy. I have stressed the positive sides of that planning activity. I will also point out that the actual monetary and fiscal policy in Sweden during the postwar years has not been ideal. The fault is not so much with the forecasting activity relating to the aforementioned inflationary gaps but with the failure to undertake efficient measures to close such a gap. The result has been the loss of our gold reserves, a substantial rise in the price level, and further increases in less desirable kinds of planning which prevent the inflationary tendency from coming into full expression. We have had price control, quota allocations, and other restrictive measures which belong to what has been called "suppressed inflation." It should be noticed that such a situation of unsatisfied demand increases the opportunity of carrying through what I have called autonomous rises in wages and prices. Thus it is my conviction that a more restrictive monetary and fiscal policy which would have prevented this suppressed inflation would have had many advantageous effects.

The limited time at my disposal allows me to add only a few remarks regarding the Swedish planning activity in more specialized fields. I pass over the specific types of planned regulations that were connected with our war economy. Most of these regulations have now been abolished, with the exceptions of exchange controls and the import quotas which we hope to alleviate successively, especially since the devaluation of the Swedish crown. I will only mention that there seem to be two special fields in which a rather intensive planning can be expected in Sweden in the generation ahead.

The farming industry is the first. The policy with regard to agriculture has been to keep it on a level to make us independent of food imports. At the same time the incomes of farmers and agricultural labor have been raised to conform better to the wage level in the industries. But for a further fulfillment of this program, the agricultural population must diminish still more and a new technique, utilizing larger productive units, must be applied. This development cannot take place

without guidance and support from public authorities. The planning activity is here extended to creation of new population centers with their various municipal and community affairs. On the whole there is a strongly increasing tendency to so-called "regional planning" in Sweden. This does not imply danger for the market economy, but rather gives it a rational framework within which to develop.

The same statement can be made regarding the public plans for residential building. The housing problem has long been a difficult one, especially for the lower-income groups. Now it is the aim of the government to help them to obtain better homes with modern conveniences. Because the free market did not supply such living units at a rental that the laborers could afford, the government has developed housing projects, supplying the capital at a low rate of interest (3 per cent) and subsidizing the poor and families with two or more children. This program has been successfully carried out within the limits set by the licensing authorities. Although the construction is undertaken by the building industry under competitive conditions, the ownership is not speculative but is limited to the occupants, co-operative family unions, and municipalities.

In my account of Swedish planning I have dealt at some length with the monetary aspects of economic policy. This is not only because of personal predilection but also because I think that more attention should be paid to this problem here in the United States. Since the United States has succeeded England as the leading world power, in a very important sense the stability of the entire world economy is dependent upon the stability of the dollar. Speaking as a representative of a small country—far away but nonetheless very dependent on developments here—I shall express the hope that the American government may find it possible to stabilize the dollar more successfully in the future than it has hitherto. Even if stabilizing the dollar is not regarded as a critical problem domestically, surely you must realize this responsibility to the rest of the world. May I suggest that it is the task of American economists to help their statesmen in the elaboration of such stabilization programs. While we can learn much from you, perhaps the Scandinavian experience in national budgeting can be of assistance here. In addition, I should like to see greater emphasis in your writings and teachings to strengthen public opinion in this field. Such influence on public opinion would perhaps go a long way to enabling you to authorize the granting to responsible officials of the necessary discretionary powers in regard to monetary and banking and fiscal controls which, to my mind, are essential for monetary economic stability under your democratic institutions.

DISCUSSION

WILLIAM DIEBOLD, Jr., *Rapporteur*

A number of questions concerned the limits to national planning set by the dependence on world trade of such countries as Sweden and the United Kingdom. Professor Lindahl took the view that while this dependence creates difficulties, it makes planning all the more imperative, not superfluous. Sweden's recent devaluation was aimed at solving the export problem; the question now is whether the higher cost of imports can be kept from having an inflationary effect. At present the government subsidizes imports for this purpose. Sir Henry Clay pointed out that Britain's export problem is more difficult than that of some other European countries because of the very large quantities of goods Britain is trying to push into world trade. When a country is as heavily dependent on imports as the United Kingdom, the need to balance its accounts must have an effect on national planning. What that effect is we shall learn when those conditions exist—at the end of the Marshall Plan.

Another group of questions rose out of the speakers' emphasis on maintaining a constant purchasing power for money. One member of the audience considered this aim incompatible with the maintenance of a market, which implies fluctuations. Both speakers and the chairman rebutted this view, holding that a market economy requires only the fluctuation of individual prices, which is consistent with a stable general price level. Professor Lindahl emphasized the fact that fluctuations in individual prices are necessary to maintain the purchasing power of money, since price rises in some fields have to be offset by declines elsewhere. This led another member of the audience to question whether the kind of policy advocated by the speakers would be adequate to deal with cases in which a price decline in one field led to an accelerated drop in other prices. If this starts to happen, will it not be necessary to use monetary measures to prevent a general fall in prices? Professor Lindahl felt that to carry out a rational monetary policy the government must hold strictly to the principle of stable general prices. An accelerated fall in some prices must be compensated by rises in others. It is a good principle to avoid looking only at the employment effects of a particular development, otherwise the long-run policy is likely to be defeated.

In answer to several questions about Swedish policy, Professor Lindahl made the following points. Most new investment in Sweden comes from the reinvestment of profits by private firms, which the government encourages by levying a higher tax on distributed profits. On the whole the Swedish authorities have followed a policy of keeping down interest rates, particularly on bonds. This has been done partly to limit the burden of the national debt but primarily to hold down building costs and rents. Sweden does not have quite the same problem as the United States in this connection since the Swedish Government has more powerful means of restricting investment—for instance, the licensing of building. In recent years inflationary pressures in Sweden have resulted in part from the desire of various groups in the population to improve their position. The government has been anxious to satisfy

these desires, particularly for the low-income groups, reckoning, perhaps, that the social advantages would warrant the inflationary risks. However, in Professor Lindahl's view, this phase is past and he hoped that in the future the dominant consideration in economic policy would be the maintenance of a stable price level. He thought there were signs that the various political parties could agree on such a program.

Is it true that the British nationalization program has the effect of "embalming monopoly," asked a member of the audience? Oskar Lange and others have argued that socialism can simulate the conditions of competition. Is anything of this sort being done in England? Sir Henry Clay answered that all the nationalization measures put through so far—and the proposed nationalization of steel—grant a legal monopoly to the new government corporations. The possibility of nationalizing only certain firms in an industry has been discussed privately but has not attracted public interest. Sir Charles Reid—whose report on the need for modernizing the coal mines had a lot to do with the acceptance of nationalization and who subsequently resigned from the National Coal Board because he despaired of getting modernization—advocates the creation of twenty-five or twenty-six regional coal boards each of which would be a trading entity, keeping its own accounts, and free to compete with the others.

Another questioner asked about the cost of administering the kind of economic plans the speakers had discussed. Professor Lindahl said that much paper work and the employment of many people are inevitable in planning. One has to take these consequences to have the plan. Referring to some figures mentioned by the questioner, Sir Henry Clay said that from 1939 to December, 1948, the increase of government employees and members of the armed forces in the United Kingdom was about 100,000 greater than the decline in the number of unemployed. He pointed out, however, that during that period the economy has absorbed a number of people who were added to the labor force. Certainly the paper work involved in planning has been something of a burden to businessmen. It used to be necessary to get a licensing for any building repairs that cost more than ten pounds. Eighteen months ago the limit was raised to a hundred. This eliminated about a million applications a year, of which something like 90 per cent had been granted. Since each license involved six forms, the change in regulations saved 6,000,000 forms.

CAPITALISM AND MONOPOLISTIC COMPETITION: I. THE THEORY OF OLIGOPOLY

MONOPOLY AND OLIGOPOLY BY MERGER

By GEORGE J. STIGLER
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The growth of individual firms to great size through merger with rivals is an outstanding development of modern economic history. As late as 1890, Marshall could view the life history of the firm as a silhouette of that of man in an age of high infant mortality: the firm began as a small venture; if it survived the early years, it straggled along or grew at a rate governed by the entrepreneur's ability—occasionally reaching large size if his ability was extraordinary or his children's abilities great—but eventually it languished into obscurity and then into oblivion.¹ The whole process usually took place, one infers, in one or two generations. I have no reason to question the realism of this picture in the age of noncorporate enterprise; and there are reasons for not wholly abandoning it even today. An anthropomorphic theory of the growth of the firm, however, scarcely fits our modern giants. There are no large American companies that have not grown somewhat by merger, and probably very few that have grown much by the alternative method of internal expansion.²

The present paper seeks to summarize some of the major episodes in the development of the merger movement, with special reference to the question of monopoly. The discussion is restricted to so-called "horizontal" combinations, which are quantitatively much the most important form of merger.³

I. Some General Theoretical Considerations

We wish to examine the conditions under which it is profitable for competing firms to merge for monopoly. It is expedient to begin with four unpromising assumptions, all of which will be relaxed or defended subsequently: (1) long-run average and marginal cost of production

¹ *Principles of Economics* (8th ed.; London, 1920), Bk. IV, Ch. XI, XII.

² Unless otherwise indicated, size of the firm is to be measured relative to the size of the industry.

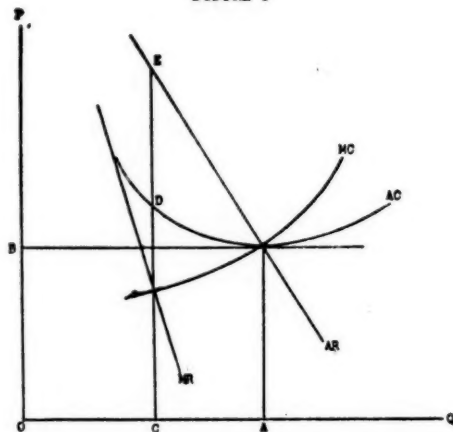
³ In 1937, 85.7 per cent of the manufacturing establishments belonging to "central offices" (i.e., multiple-plant firms) were engaged in "uniform" activities. Of course many of these plants were constructed by the parent concern, and there are other deficiencies in the data, but it is probable that horizontal mergers are more important than all other forms of interplant relationship combined (see TNEC Monograph No. 27, *The Structure of Industry*, p. 164).

are equal for firms of all relevant sizes;⁴ (2) entry of new firms is free, although not necessarily inexpensive; (3) the demand for the output of the industry is stable; (4) the specialized resources ("fixed factors") employed in the industry are indestructible.

Under these conditions, will mergers for monopoly occur? The tempting offhand reply is in the negative, because under these conditions there can be no monopoly profits in the long run; the first two conditions are sufficient to insure this. This offhand reply, however, is to the question: will mergers for monopoly exist? It is not an answer to our question: will mergers for monopoly occur? They may occur.

The argument that monopolies may be profitable even under these unfavorable conditions will be developed with a partial geometrical illustration. Consider an industry meeting the four conditions listed above and consisting of numerous identical firms which are in long-run competitive equilibrium. Each firm will have the short-run cost curves displayed in Figure 1, and it will be operating at output OA , price OB ,

FIGURE 1



and making no profits. All the firms are now merged into a monopoly, and each plant (= former firm) now has a pro rata share of aggregate demand, AR , with corresponding marginal revenue, MR . Accordingly it operates at output OC and makes profits of OC times DE . Entry of new firms therefore takes place, and the pro rata demand curve of each plant in the merger now shifts to the left, price falls, and profits

⁴This assumption will be discussed below, but perhaps a remark is called for on the indeterminacy of the output of the firm under competition when its long-run average cost curve is horizontal. The simplest way to eliminate the indeterminacy is to sacrifice the perfection of competition (but nothing else) by having each firm have a demand curve with an elasticity of (say) -100 .

diminish.⁵ Eventually the number of rivals will grow until the merger is reduced to the long-run equilibrium level of permanent loss, since neither the merger nor the new rivals can withdraw from the industry.

The simple but important conclusion to be drawn from this argument is that a merger for monopoly may be profitable, in the sense that the present value of the monopoly profits and (so to speak) monopoly losses is positive. If the entry of new firms is not too rapid, the merger may make monopoly profits for a considerable period; and, even though thereafter the losses are permanent, their discounted value need not be so large as to wipe out the initial gains. The essence of the explanation of mergers under these conditions therefore lies in the time required to achieve long-run equilibrium; and this essence lingers in the more general case.

If we relax our assumptions "2," "3," and "4," the prospects of net gain from merger for monopoly are increased in frequently encountered circumstances. If the specialized resources of the merger are not indestructible, investment can be withdrawn from the industry so that, after the initial period of gain and a subsequent period of loss, the long-run equilibrium will be attained, with the merger receiving a competitive rate of return on its investment in the industry.⁶ If the industry's demand is growing, the amount of resources the merger must withdraw will be reduced; and, if the demand is growing sufficiently rapidly, no investment need be withdrawn: the merger can maintain its absolute size but decline in relative size.⁷ If the entry of new firms and the expansion of rivals can be hindered or prevented, of course the monopoly profits will accrue for a longer period. If the rate of entry is a function of price and profits, the merger can reduce or retard entry by a lower price policy; in effect it buys a longer period of monopoly at the price of a lower rate of monopoly profits.

Let us consider now the mechanics of mergers for monopoly. (We defer the question of why mergers occur when they do.) If there are relatively few firms in the industry, the major difficulty in forming a merger is that it is more profitable to be outside a merger than to be a participant. The outsider sells at the same price but at the much larger output at which marginal cost equals price. Hence the promoter of a merger is likely to receive much encouragement from each firm—almost

⁵The explicit analysis can be carried through by a conventional application of the dominant-firm analysis; that is, by constructing the demand curve for the monopoly by subtracting from the aggregate quantity demanded at each price the amount that the new firms (acting competitively) will sell (see my *Theory of Price* [New York, 1946], p. 227).

⁶The period of loss arises because in general it requires less time to increase than to withdraw investment.

⁷This assumes (with what validity I do not know) that the rate of entry of new firms will not be increased by the existence of the merger; but see the last point in the paragraph.

every encouragement, in fact, except participation. In order to overcome this difficulty, it will often be necessary to make the participation of each firm contingent on that of other firms and execute the merger in a single act. We know too little of the theory of coalitions to be able to predict the percentage of the industry that will be merged, but of course it must be fairly high if it is to have any purpose.

If there are relatively many firms in the industry, no one firm plays an important role in the formation of the merger; and it is possible for the merger to expand in a more gradual process and acquire firms on less exacting terms. In fact, several firms may enter upon programs of growth by merger.

Let us return to our first two assumptions. Our first assumption—that there are neither economies nor diseconomies of scale—will please few beside Euler. Two widely accepted, and somewhat inconsistent, beliefs clash with this assumption: (1) mergers are effected to obtain the economies of large-scale production and (2) the diseconomies of scale are the chief bulwark of competition. Both these beliefs will be discussed below; here we shall enter briefly into discussion of the validity of the assumption of constant returns to scale.

The comparative private costs of firms of various sizes can be measured in only one way: by ascertaining whether firms of the various sizes are able to survive in the industry. Survival is the only test of a firm's ability to cope with all the problems: buying inputs, soothing laborers, finding customers, introducing new products and techniques, coping with fluctuations, evading regulations, etc. A cross-sectional study of the costs of inputs per unit of output in a given period measures only one facet of the firm's efficiency and yields no conclusion on efficiency in the large.⁸ Conversely, if a firm of a given size survives, we may infer that its costs are equal to those of other sizes of firm, being neither less (or firms of this size would grow in number relative to the industry) nor more (or firms of this size would decline in number relative to the industry).

A combination of this argument and casual observation suggests that the economies of scale are unimportant over a wide range of sizes in most American industries, for we commonly find both small and large firms persisting. We shall recur to this matter, but two observations should be made now. The first is that our analysis of mergers still holds if there are minor economies or diseconomies of scale, but fails

⁸ As commonly conducted, statistical comparisons of costs or rates of return are not even conclusive on the "static" problem. They demand arbitrary asset valuations to avoid the tautological result that differences in costs measure returns on differences in capital values; and they usually cover too short a period to avoid the regression problem (on which, see M. Friedman and S. Kuznets, *Incomes from Independent Professional Practice* [New York, 1945], Ch. VII).

if they are large. With large diseconomies, mergers are unprofitable; with large economies, monopoly or oligopoly is inevitable, and there will not be many rivals to merge. The second point is that the equality of private costs carries no implication that social costs of firms of different sizes are equal.⁹

Free entry—our second assumption—may be defined as the condition that long-run costs of new firms if they enter the industry will be equal to those of firms already in the industry. This does not mean, as many infer, that a new firm can enter and immediately be as profitable as an established firm. We do not begrudge the new firm a decent interval in which to build its factory; we should be equally willing to concede a period during which production is put on a smooth-running schedule, trade connections are developed, labor is recruited and trained, and the like. These costs of building up a going business are legitimate investment expenses, and, unless historical changes take place in the market, they must be equal for both established and new firms.¹⁰

With this understanding, free entry seems a valid characterization of most American industries. One may concede this and still argue that, because of the large capital requirements necessary to establish a new company of minimum efficient size, free entry is often difficult, and firms in industries with (absolutely) large capital requirements have a sheltered position. I have as little basis for my skepticism of this argument as its many adherents have given for supporting it.

This brief discussion leaves many questions about mergers unanswered. We shall attempt to answer some of them—and in the process discover new questions—by an examination of the merger movement in America. We shall find it useful to divide this history into two periods, in which monopoly and oligopoly, respectively, were the primary goals.

II. Merger for Monopoly

The era of merger for monopoly ended in this country roughly in 1904, when the *Northern Securities* decision made it clear that this avenue to monopoly was also closed by the antitrust laws. The transition was abrupt in a historical sense. It is revealed by the fact that the United States Steel Corporation, which had quietly picked up in 1902-04

⁹ A comparison of the social costs of firms of different sizes would require, for example, the elimination of differences in private costs arising out of differences in "bargaining power" in purchasing inputs. It is tempting to argue that if the large firm is not more efficient than the small firm in private terms, it is less efficient in social terms (for then its monopolistic advantages are eliminated). I am inclined to yield to the temptation, although small firms have some private advantages (chain-store taxes) and large firms have private disadvantages (maintaining good public relations).

¹⁰ On this view, the infant-industry argument for tariffs is mistaken (at least when external economies do not enter).

a few steel firms overlooked in the haste of organization, felt it necessary to obtain permission from President Theodore Roosevelt to acquire the Tennessee Coal and Iron Company in 1907.¹¹

When and why did the merger movement begin? Sporadic mergers, often founded on marriage, are no doubt as ancient as man; probably for long they were occasional and relatively small in scale, and they were offset by the divestitures necessary to endow sons in a more fertile age. In this country mergers for monopoly began on a large scale only in the eighties, they reached a minor peak at the beginning of the nineties, and they attained their pinnacle at the end of the century.¹²

Our theory is that mergers for monopoly are profitable under easy assumptions that were surely fulfilled in many industries well before the mergers occurred. The only persuasive reason I have found for their late occurrence is the development of the modern corporation and the modern capital market. In a regime of individual proprietorships and partnerships, the capital requirements were a major obstacle to buying up the firms in an industry, and unlimited liability was a major obstacle to the formation of partnerships.

General incorporation laws antedate the Civil War,¹³ but the powers of these early corporations were severely limited. They could not hold stock in other corporations; they could not merge with another corporation; limits were placed on their capitalization; often they could not do business outside the state of incorporation; exchange of capital assets for stock required the unanimous consent of the stockholders; etc. Only in the eighties did New Jersey initiate the competition among states for corporations, which in twenty years eliminated almost every restriction on mergers.¹⁴ In this same period the New York Stock Exchange developed into an effective market for industrial securities.

¹¹ Union Steel (1902), Troy Steel Products (1903), and Clairton Steel (1904) together had twice the ingot capacity of Tennessee Coal and Iron. On the last merger, see the hearings of the Stanley Committee, *Hearings before the Committee [of the House] on Investigation of United States Steel Corporation* (Washington, 1911), Parts 1-6.

¹² The number of combinations with capitalization of 1 million dollars or more, as compiled by Luther Conant, varied as follows:

1887	8	1892	10	1897	4
1888	3	1893	6	1898	20
1889	12	1894	2	1899	87
1890	13	1895	6	1900	42
1891	17	1896	5		

(Eliot Jones, *The Trust Problem in the United States* [New York, 1921], p. 39.) There was an earlier era of railroad consolidations (see, e.g., George P. Baker, *The Formation of the New England Railroad Systems* [Cambridge, 1937], especially Ch. XI).

¹³ See G. H. Evans, *Business Incorporations in the United States, 1800-1943* (New York, 1948).

¹⁴ See E. Q. Keasbey, "New Jersey and the Great Corporations," *Harvard Law Review*, 1899-1900, pp. 198-212, 264-278; W. C. Noyes, *A Treatise on the Law of Intercorporate Relations* (Boston, 1902), and, especially, R. C. Larcom, *The Delaware Corporation* (Baltimore, 1937).

These institutional changes seem to be the proximate causes for the development of the merger movement in the last two decades of the nineteenth century.

Almost invariably the leading firms joined together simultaneously, as our theory leads us to expect.¹⁵ The combinations frequently attained high percentages of national output but seldom became strict monopolies. The contemporary estimates of their shares of the market are rough, and little attention was paid by the estimators to the shares of the firm in particular geographical and product markets. With these provisos, we may note that the mean share of the market controlled by the mergers studied by the Industrial Commission was 71 per cent.¹⁶ In the ninety-two large mergers studied by Moody, the distribution by share of market was similar: seventy-eight controlled 50 per cent or more of the output of the industry; fifty-seven controlled 60 per cent or more; and twenty-six controlled 80 per cent or more.¹⁷ Even in Dewing's fourteen industries in which the mergers failed, the mean percentage was 54.¹⁸

Almost invariably the share of the merger in the market declined substantially as time went on. Sometimes the entry of new firms was successfully prevented or delayed by ruthless warfare (National Cash Register), patents (Eastman, United Shoe Machinery), or coercion of suppliers or buyers (American Tobacco). These instances are not numerous, however, and such tactics were successful chiefly in small industries; in steel, sugar refining, agricultural implements, leather, rubber, distilleries, cans, etc., the dominant company lost ground relative to the industry.¹⁹

Why was merger preferred to collusion? Part of the answer lies in the prima facie illegality of collusion after 1890. This point should not be pressed, however. The effectiveness of the Sherman Law in dealing with conspiracies was not clear until 1899, when the *Addyston Pipe* case was decided;²⁰ and there was a contemporaneous wave of amalgamations in England, where conspiracies were unenforcible but not ac-

¹⁵ The most prominent exception, Standard Oil, is in one sense no exception. It is more an instance of involuntary merger, and its history seems to me one of the relatively few cases appropriately analyzed in analogy to warfare.

¹⁶ The distribution was:

Per Cent	Companies
25- 50	1
50- 75	11
75-100	10

(United States Industrial Commission, *Report*, Vol. XIII, *passim*.)

¹⁷ John Moody, *The Truth about the Trusts* (New York, 1904), p. 487.

¹⁸ A. S. Dewing, *Corporate Promotions and Reorganizations* (Cambridge, 1914), p. 526.

¹⁹ For some instances see my *Five Lectures on Economic Problems* (London, 1949), Lecture 5.

²⁰ See W. H. Taft, *The Anti-Trust Act and the Supreme Court*, and J. D. Clark, *The Federal Trust Policy*.

tionable.²¹ Mention should also be made of the conflicting tendencies of the greater durability of mergers and the ability to avoid diseconomies of scale through collusion. I am inclined to place considerable weight upon one other advantage of merger: it permitted a capitalization of prospective monopoly profits and a distribution of a portion of these capitalized profits to the professional promoter. The merger enabled a Morgan or a Moore to enter a new and lucrative industry: the production of monopolies.

It is sobering to reflect on the attitudes of professional economists of the period toward the merger movement. Economists as wise as Taussig, as incisive as Fisher, as fond of competition as Clark and Fetter, insisted upon discussing the movement largely or exclusively in terms of industrial evolution and the economies of scale. They found no difficulty in treating the unregulated corporation as a natural phenomenon, nor were they bothered that the economies of scale should spring forth suddenly and simultaneously in an enormous variety of industries—and yet pass over the minor firms that characteristically persisted and indeed flourished in these industries. One must regretfully record that in this period Ida Tarbell and Henry Demarest Lloyd

TABLE 1
MERGERS BY LEADING STEEL FIRMS MEASURED BY PERCENTAGE
OF INDUSTRY INGOT CAPACITY

COMPANY	INITIAL YEAR	PER CENT OF INDUSTRY'S CAPACITY			PER CENT OF IN- DUSTRY'S CAPACITY ACQUIRED BY MERGER	
		Initial Year	1908	1948	Initial Year- 1908	1908-48
U.S. Steel.....	1892	14.49	50.14	33.14	33.75	1.00
Bethlehem.....	1892	3.29	0.56	14.64	.....	12.66
Republic.....	1896	2.08	1.46	9.13	1.08	7.23
Jones and Laughlin.....	1898	4.59	4.17	5.03	0.18	2.05
National.....	1920	.....	.....	4.30	.....	0.90
Youngstown Sheet.....	1908	.....	1.76	4.25	.....	2.01
Inland.....	1904	0.50	0.59	3.61	.....	.....
American Rolling.....	1901	0.07	0.15	3.57	0.05	2.28
Sharon.....	1904	0.28	0.26	1.67	.....	1.34
Colorado.....	1901	0.96	2.93	1.54	.....	0.19
Wheeling.....	1901	0.73	0.56	1.50	.....	1.41
Crucible.....	1898	0.71	1.01	1.33	1.06	1.49

Source: Compiled from directories of iron and steel works. The data presented by United States Steel Corporation indicate a much larger control in the first decade, presumably because the industry's capacity was overstated in the directories (see TNEC, *Hearings*, Part 26, pp. 13, 852).

²¹ J. H. Clapham, *An Economic History of Modern Britain* (Cambridge, 1938), Vol. III, Ch. IV.

did more than the American Economic Association to foster the policy of competition.

III. Merger for Oligopoly

One great change has taken place in the merger movement since the *Northern Securities* decision: the share of the industry merged into one firm has fallen sharply. In the early period, as we have seen, the leading firm seldom merged less than 50 per cent of the industry's output; in the later period the percentage has hardly ever risen this high. The new goal of mergers is oligopoly.

The change has been most striking in the industries which were merged for monopoly at the beginning of the century. The merger firm has declined continuously and substantially relative to the industry in almost every case. The dominant firm did not embark on a new program of merger to regain its monopolistic position, however; the new mergers were undertaken by firms of the second class. The industry was transformed from near-monopoly to oligopoly. Cement, cans, petroleum, automobiles, agricultural implements, and glass are examples. We may illustrate the development by the steel industry (Table 1): United States Steel's share of ingot production dropped sharply, but the company absorbed only two small rivals (Columbia Steel, 1930; Geneva plant, 1945), and the chief mergers have been Bethlehem and Republic. Even if one lumps together the (say) four largest firms in the industry, in general there has been a decline in the concentration of production.²²

TABLE 2
MANUFACTURING ESTABLISHMENTS IN CENTRAL OFFICES,
1919 AND 1937

Industry	1919	1937
Food and kindred products.....	4,544	8,529
Textiles and their products.....	2,832	2,703
Iron and steel and their products.....	1,602	2,420
Lumber and its remanufactures.....	2,829	2,390
Leather and its finished products.....	495	503
Paper and printing.....	918	1,865
Liquors and beverages.....	268	738
Chemicals and allied products.....	2,409	2,800
Stone, clay, and glass products.....	1,100	1,325
Metal and metal products other than iron and steel.....	445	530
Tobacco manufactures.....	533	124
Vehicles for land transportation.....	287	390
Miscellaneous industries.....	1,362	1,382
Total.....	19,624	25,665

Source: 1919 data from W. L. Thorp, *The Integration of Industrial Operations* (Washington, 1924), p. 113; 1937 data, which are only roughly comparable, from TNEC Monograph No. 27, *The Structure of Industry*, p. 211.

²² See my *Five Lectures*, pp. 63ff.

The merger movement has also reached the many-firm industries in the later period. We may measure mergers between 1919 and 1937 in a rough fashion by comparing the number of manufacturing establishments belonging to central offices at the two dates (Table 2); it appears that the food industry was the chief center of merger activity, although the paper and printing and iron and steel industries also saw much merger activity. National Dairy is perhaps the most striking example of merger in the food industries—it acquired 331 firms in the decade ending in 1933²³—but Borden, General Foods, General Mills, and the bakery chains also date from this period.²⁴ In general, such mergers led to local oligopoly in the primary products (fluid milk, bread, etc.) and to national oligopoly in lesser products such as cheese.

The Sherman Law seems to have been the fundamental cause for the shift from merger for monopoly to merger for oligopoly. Sometimes its workings were obvious, as when Standard Oil was dismembered and when the leading baking mergers were prevented from combining.²⁵ More often, however, its workings have been more subtle: the ghost of Senator Sherman is an ex officio member of the board of directors of every large company. This explanation for the new direction of mergers is vulnerable to the criticisms that it is simple and obvious, but no plausible alternative explanation is available.²⁶

It is my impression—based chiefly upon the more modest issuance of securities of mergers and the apparent ease of entry into the new merging industries—that the mergers for oligopoly in the later period have been less effective in restraining or postponing competition than the earlier mergers for monopoly. This is not to argue, however, that they left competition as they found it; indeed, the one important weakness in the Sherman Act as it is sometimes interpreted is the belief that oligopoly affords a satisfactory form of organization of our economy. This belief is apparently held, as it was certainly fostered, by one of the greatest of contemporary judges, Learned Hand, the author of the famous dictum that control by one firm of 64 per cent of an industry may not be monopoly and that 33 per cent surely is not.²⁷ It is true, no doubt, that oligopoly is a weaker form of monopolization than the single firm, but it is not so weak a form that it can be left to its own devices. If this view—which is almost universally held by modern economists—is

²³ Federal Trade Commission, *Agricultural Income Inquiry* (Washington, 1938), I, p. 237.

²⁴ There was also much merging in fuel and ice; City Ice and Fuel is perhaps the largest merger, but several others, such as American Ice and Atlantic Company, were very active.

²⁵ *Agricultural Income Inquiry*, I, p. 308.

²⁶ It is suggestive that mergers for monopoly continued to be typical in England in the twenties (see Patrick Fitzgerald, *Industrial Combination in England* [London, 1927]).

²⁷ "... it is doubtful whether sixty or sixty-four per cent would be enough [to constitute monopoly]; and certainly thirty-three per cent is not" (*United States v. Aluminum Co. of America*, 148 F. [2d] 424).

correct, then our chief task in the field of antitrust policy is to demonstrate beyond judicial doubt the social undesirability of permitting oligopoly by merger (or by other methods) in large American industries.

IV. Conclusions

The foregoing survey of the merger movement raises a set of inter-related questions; they concern the economies of scale, the capital market, and the entry of firms into an industry.

The broad sweep of our discussion would suggest that the private diseconomies of large-scale production are only an occasional and minor barrier to merger for monopoly. The chief barriers to monopoly, in addition to the Sherman Act, have been the capital requirements of mergers and the tendency of rivals to grow in number and size.

To find in an imperfect capital market a bulwark of competition seems paradoxical, but the paradox is not deep. Until recent times the personal distribution of wealth set a limit upon the size of firms, and modern economic societies have been sufficiently egalitarian to make personal monopolization of large industries impossible. The corporation and the securities markets have severed the connection between personal wealth and industrial size and thus weakened the institutional basis of competitive enterprise.

The diseconomies of scale offer a weak supplement to the limitations once provided by personal wealth. Properly interpreted, conventional theory does not contradict this tentative finding. We customarily find in entrepreneurship the limitation to the size of firm, and we find the chief tasks of the entrepreneur arising out of uncertainty. Much, although of course not all, uncertainty stems from the competitive behavior of rivals, so that entrepreneurship may well be subject to increasing returns to relative size as well as to decreasing returns to absolute size, with no clear verdict for either force over a wide range of sizes.

We are thus led to "new entry" as the chief defense of competition—a most unseemly reversion to the ruling economic theory of 1900. It is now popular to deprecate the importance of new entry because few firms can accumulate the capital necessary to produce efficiently in the great industries. To the extent that the criticism rests on the alleged economies of scale, I have argued that it is mistaken; to the extent that it rests on imperfections of the capital market it runs contrary to (but is not necessarily inconsistent with) the argument we have advanced that the capital market has been improving—in certain directions, at least—too much! Yet there is support for the skeptics of easy entry in the fact that the mergers for monopoly have frequently been very profitable.

Such inconclusive conclusions are not too troublesome. This paper is designed to be only an introduction to the merger problem. To this end, it is sufficient if I emphasize again the significance of the movement. To the theorist it offers a stimulating challenge: the merger movement does not fit too well into the received categories of stable competition and irresistible monopoly. To the student of social policy it offers the promising hypothesis: it is possible to change the trend of industrial organization by the lackadaisical enforcement of an antitrust law. And to the student of social sciences it offers the supremely optimistic—and pessimistic—suggestion: when economists agree that a movement is inevitable, it is not.

WORKABLE COMPETITION IN OLIGOPOLY: THEORETICAL CONSIDERATIONS AND SOME EMPIRICAL EVIDENCE

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Since Professor Clark presented a paper on "workable competition"¹ ten years ago at these meetings, the concept therein emphasized has deservedly received a good deal of attention. In an economy where technological and other factors make any close approximation to pure and perfect competition substantially unattainable, it is important for purposes of policy to know in what kinds of imperfect markets competitive behavior will be reasonably compatible with a viable capitalism and will reasonably enhance general economic welfare. Clark made a noteworthy beginning in the analysis of this issue. At this time it may be appropriate to reconsider his suggestions, and also to inquire to what extent these may be revised and extended in the light of progress in theory and empirical study during the last decade. To abbreviate the discussion, I will confine myself entirely to the issue of workable competition within markets of oligopolistic structure—where at least some individual sellers control enough of the market that a recognized interdependence may reasonably be inferred.

According to Clark, the main considerations which influence competitive behavior in a market are the number and size distribution of sellers, the degree of product differentiation, the geographical market structure, the conditions of entry and exit, the long- and short-run cost conditions of firms, and the character of market information; also the degree of current output control by firms, the channels of distribution, and the method of price making—whether price is "quoted" or "supply-governed." In the derived classification of market situations, Clark establishes two major categories of oligopoly—pure oligopoly and monopolistic competition—the latter category including large-number cases as well as differentiated oligopoly. The monopolistic-competition category is not essentially subdivided, except to set aside the evidently rare case of supply-governed price from the common one of quoted price. Pure oligopoly, however, has several subcategories: (1) with supply-governed prices; (2) with quoted prices which are either open and perfectly conformed to, or imperfectly known and subject to chaotic discrimination, or open with limited departures and secret concessions; and (3) with quoted prices and significant spatial differentiation with

¹ J. M. Clark, "Toward a Concept of Workable Competition," *American Economic Review*, June, 1940, pp. 241-256.

or without freight absorption. Distinctions were not drawn within the oligopoly categories upon the basis of concentration among sellers, conditions of entry, etc.; except for setting aside differentiated-product cases, the major distinctions run in terms of price-making methods, degree of market information, and evident direction of competitive behavior.

Clark's major argument as related to this classification is that given the imperfection imposed by fewness of sellers, some additional remedial imperfection is needed as an antidote to the first in order to preserve workable competition. Thus he believes that differentiated oligopoly, if product differentiation is not extreme, gives rise to "some of the healthiest cases of workable competition in large-scale industry." Perfectly conformed-to open prices in pure oligopoly are suspect, although they are more likely to be sticky than fully monopolistic. Chaotic price competition with imperfect knowledge is likely to be ruinous to sellers, especially if there is cyclical or stand-by excess capacity. Open price with limited departures "contains no guarantee of ideal prices; but it is something intermediate between [effective tacit collusion] and the ruinously low prices likely to result from unlimited market chaos; more strongly competitive than the first, and more workable than the second." No definite conclusions are reached as to workability of oligopolistic competition with supply-governed prices or with important spatial differentiation. To this Clark adds that in the long run the threat of entry of competitors and the horizontality of the long-run cost curves of firms serve as useful checks against extreme departures from competitive results.

There is obviously much of merit in this essay, briefly and inadequately reviewed here, including a rather effective answer to those who would hold that all oligopoly tends to approximate pure monopoly behavior, or that reasonably satisfactory results are possible only if all oligopolists price independently on a price-equals-marginal-cost basis. Fairly satisfactory competitive results may emerge from imperfect collusion or because of the long-run threat of entry. Taking Clark's argument as a beginning, however, let us see if further progress is possible. I will abbreviate the discussion by first offering two suggestions, mainly in the form of constructive criticism of Clark's essay.

First, as regards the concept of workable competition, the economist seems reasonably obliged to define it other than by the citation of examples, and more explicitly than as somewhere between full collusive monopoly and apparently destructive market warfare. The evident criteria of workable competition are the results emergent from the market process; competition is workable if productive efficiency reasonably approaches the best attainable, if industry output is not much restricted

below and does not much exceed a level generally consistent with good allocation of resources, if an excessive proportion of resources is not devoted to sales promotion effort, if the income share going to profit is not substantially higher than required but high enough to reward investment and to induce socially desirable innovation, if opportunities for such innovations are not grossly neglected, and if prices respond to cyclical changes in a way which does not demonstrably intensify the cyclical problem. The definition thus implies the determination first of certain ideals or goals of performance and second of tolerable degrees of deviation from these goals. Unfortunately, economic theory to date does not supply precise, meaningful, and unquestioned norms for all of the essential dimensions of behavior; no certain norm for price flexibility is available, for example, and evaluations of desirable amounts of selling cost are at least operationally quite ambiguous. In addition, assessment of actual behavior in terms of such norms is impeded by difficulties of measurement and because static equilibrium norms are applied to dynamic process situations. And finally, for criteria of tolerable deviations, we have little more than the *ad hoc* judgments of the observer concerning what might be had and how serious the adverse impact of a given deviation is. In view of all this, any economist's assessment of the workability of competition is likely to have a highly provisional and even personal character and is likely to rest heavily on the *ad hoc* assessment of obvious alternatives in given situations.

The actual assessment of workability of competition in particular situations—to be made presumably in the teeth of the serious difficulties just enumerated—will consist in the appraisal of certain measurable results of the market process. On a highly provisional level I would suggest the following general signs of nonworkable competition in oligopoly: a profit rate averaging quasi-perpetually well above an established normal return on investment (or falling persistently below it);² scale of many firms seriously outside the optimal range;³ considerable chronic excess capacity not justified by secular change or reasonable stand-by provision; competitive selling costs exceeding a stated proportion of total cost; persistent lag in adoption of cost-reducing technical changes or persistent suppression of product changes which would advantage buyers. In each case one might establish objective standards by reference to which results could be classified as clearly unworkable, clearly workable, or in a borderline range. A market could be considered a case of unworkable competition if it had an extremely

² A long-run tendency to subnormal profits seems unlikely in oligopoly, since the tendency should be self-correcting in a number of ways.

³ Low or negligible excess profits plus reasonable efficiency of scale and capacity would imply a reasonably good relation of price to long-run marginal cost, and the absence of any serious degree of monopolistic output restriction.

bad rating in any direction or moderately bad or suspicious ratings in several.

Given some such definition of workable and unworkable competition, in terms of results, we may still wish to probe for an association between such results and their possible determinants, to the end of establishing and classifying the underlying and potentially controllable conditions which may determine the workability of results.

Such determinants of price and other market results might be sought primarily either at the level of characteristics of market structure (number of sellers, etc.) or at the level of characteristics of competitive behavior (collusive, price quoting, etc.).⁴ My second point is that the potential association of price results to market structure deserves primary emphasis. Whatever the degree of association within oligopolies between competitive behavior and results, it seems quite likely that such behavior may be in turn either influenced or determined by certain characteristics of the underlying market structure. If so, a demonstrated association between market structure and results would establish the more fundamental determinants of workability of competition (and, also, determinants more easily influenced by conventional public policy measures). Moreover, it seems unlikely a priori that the results emergent from a given pattern of competitive behavior are substantially independent of the underlying market structure. Certain structural characteristics of markets—perhaps other than those which influence the pattern of competitive behavior—may exert a definite influence on results emergent from a given pricing pattern, and there may thus be no determinate simple association between character of competitive behavior and emergent results. It would thus seem preferable to explore first the possible association of workability of competition to market structure, and in the process also to appraise the complex role evidently played by apparent competitive behavior as a resultant and a determinant. As the association of market structure to results is explored, moreover, a priori analysis would suggest attention not only to product differentiation (emphasized by Clark) but also to any other potentially important characteristics of structure, certainly including the number and size distribution of sellers and of buyers and the condition of entry to the market.

Granted, however, that it would be convenient to establish an association between oligopoly market structure and the workability of competition, does such an association actually exist? This question, like many others in economics, can finally be answered only by detailed

⁴ Clark examines both levels, although within the oligopoly category he emphasizes the latter. But he poses the principal problem which interests us here: can we associate workable and unworkable results for oligopolies with certain characteristics of market structure or of competitive behavior?

empirical investigation, but it may be useful to inquire whether, on a priori grounds, any such association is to be expected. By arguing from a very few simple premises and declining to pursue the argument beyond the point at which the introduction of further premises would be required, some theorists have concluded that all oligopoly price, cost, and output results are in strict logic indeterminate within a considerable range, and that, so long as the number of sellers is few, no determinate association between market structure and such results can be predicted. Although their caution may be commendable, I would suggest that by pursuing the usual arguments further, and adopting added assumptions, as required, based on our best judgment of the probable character of the strategic facts, we may escape the conclusion of a sort of "blanket indeterminacy" for oligopoly and may arrive at hypotheses concerning the systematic association of oligopolistic market structure and results. The development of such hypotheses, even though the assumptions on which they must rest may be tentative, is an obvious and useful step in the setting of empirical tests. As a beginning along this line, I should like to advance a few such hypotheses for trial, indicating as time permits the particular "added assumptions" and elaborations of conventional argument upon which they rest. These will concern mainly the association of market structure to long-run results in four principal dimensions: degree of monopolistic output restriction, profits, selling costs, and the level, relative to the ideal, of the long-run average costs of producing given industry output.

As a setting for these hypotheses, let us recognize first that oligopoly markets in general can conceivably develop any of several variant patterns of competitive behavior, of which some principal types might be:

1. Effective and closely observed collusion¹ on price and/or output quotas; or its equivalent through tacit collusion or mutually recognized interdependence.
2. Imperfect collusion, subject to serious internal dissension, defections, secret price shading, etc.; or its equivalent through mutually recognized interdependence.
3. The conventional kinked demand curve pattern, resulting from a certain pattern of sellers' conjectures about their rivals' reactions.
4. "Chaotic" competition or relatively active price rivalry, potentially emergent from unrecognized interdependence, inconsistent conjectures by rivals, etc. (If chaotic to the point of persistent losses, it may be argued that this pattern would be temporary, or transitional to another.)

The choice among such patterns will presumably have some impact on results—in particular on the degree of monopolistic output restric-

tion and possibly on the size of selling costs. Thus the first case should permit of some approximation to monopoly price and output (if these values are appropriately defined under various conditions of entry); in the second and third cases, price should, *ceteris paribus*, tend to be lower and outputs larger, though by an indeterminate amount; the last case should tend to yield lower prices than any of the others, and might conceivably yield "destructively" low prices.⁵ It might also be predicted tentatively that with collusion imperfect or absent, selling costs would tend more systematically to exceed the rational monopoly level.

One obvious issue is whether the character of market structure may influence the choice among such patterns—whether there is an association of market structure to pattern of competitive behavior. But this is not the only question, since the character of certain significant results would appear not to be determined by the pattern of competitive behavior, but to be subject, given such pattern, to the influence of certain characteristics of market structure. We must thus inquire (1) if certain characteristics of market structure potentially influence the choice of competitive pattern and (2) if these or other such characteristics influence the results which a given pattern may yield.

Beginning with the latter question, it first appears that the condition of entry to an oligopolistic market may be strategic to the determination of the long-run efficiency of production—of the level, relative to the best attainable, reached by the long-run average cost for any given industry output through the adjustment of the number and scale of firms. My hypothesis in general is that under conditions of very or moderately difficult entry, reasonable long-run efficiency in scale and capacity should develop, whereas under easy entry (if this is found in oligopoly) the prospect is much less certain and substantial inefficiency may result.

First, it seems highly probable that oligopoly firms will, in the interest of profit, systematically attempt to rationalize their operations so as to avoid gross discrepancies from efficient scale and gross amounts of continually redundant capacity, at least unless the continual influx of new entry makes such attempts futile. Situations in which the bulk of output would be produced under substantial diseconomies of scale or capacity, for example, will otherwise tend to be eliminated by expansion, combination, etc. Such a result is potentially uncertain, in view of the problem of finding terms of agreement (and perfect rationalization

⁵ "Destructive" prices here refer to those persistently insufficient to yield a normal return on investment; in the long run they should certainly be self-eliminating, and even over moderate time intervals do not promise to be a major threat in oligopoly, since the incentive and the means for avoiding them are generally at hand.

seems quite unlikely), but I will postulate that the balance between the joint profit maximizing motive and the conflicts potentially forestalling agreements is generally such that, law permitting, approximate rationalization will develop unless there is a persistent disruptive force.

Second, the conditions for initial attainment and the stable maintenance of a rationalized situation should be found largely in certain conditions of entry to industries. In general it may be argued that established oligopolists, collusive or otherwise, will recognize and react to threats of entry; that the existence of impediments to entry will make it possible for them to charge prices high enough to be profitable but low enough to discourage further entry; and that established firms, provided competition does not drag price even lower, will follow such a price policy whenever the long-run profits offered by this course exceed the sum of the potentially larger short-run gains which would induce entry and the reduced future returns after entry occurs.⁶ In such cases, rationalization of scale and capacity with forestalled entry should result regardless of competitive pattern. On the other hand, where entry is easy enough that short-run monopoly pricing offers a better total prospect, excessive entry may be attracted, provided that price rivalry does not keep price below the entry-attracting level.⁷ Here the impetus to rationalization is lessened and maintenance of long-run efficiency is only one of several possibilities.

This gives us a distinction between two long-run efficiency cases, essentially in terms of the comparative attractiveness, under various conditions of entry, of the alternative time sequences of future demand (as discounted) between which established sellers may choose. Since the net superiority of one over the other sequence should depend not only upon the height of barriers to entry and the lags involved in accomplishing it, but also upon the established seller's time preference and his prognosis of market rivalry after entry, a simple unique relation between objectively ascertainable conditions of entry to a market and long-run efficiency does not necessarily exist.⁸ But we may, on the basis of certain empirical generalizations about the usual seller's expectations and time preferences,⁹ advance a tentative hypothesis con-

⁶ See J. S. Bain, "A Note on Pricing in Monopoly and Oligopoly," *American Economic Review*, March, 1949, pp. 448-464.

⁷ Even if it does, there will presumably be a tendency to regroup, as by merger, to obtain short-run monopoly profits, so that there is a considerable prospect of the waste either of inefficiently small firms or of a dynamically unstable market structure.

⁸ The elasticity of industry demand should also be a determining factor; for a simple first approximation I will neglect it and pursue the argument on the provisional assumption that differences in elasticity among industry demands will not be of decisive importance.

⁹ Here I would postulate (1) that large corporate firms of indefinite existence will in general probably not discount future profits very heavily and (2) that the uncertainty concerning market rivalry, and hence profits, after entry is attracted will weigh heavily

cerning the average relation of apparent condition of entry to long-run efficiency.

Let us distinguish three principal cases of entry:

1. Blockaded or very difficult entry, where there is an absolute institutional blockade (as through patent or resource control), or where established firms enjoy very substantial cost advantages over potential entrants,¹⁰ or where the scale of an optimum firm is very large relative to the market and the economies of scale are great. In such cases, entry could presumably be forestalled by established firms at prices yielding substantial long-run excess profits.

2. Moderately difficult (or moderately easy) entry, where established firms enjoy only moderate cost advantages over potential entrants, or where there are substantial economies of scale but where a firm producing a moderate portion of industry output can attain them.¹¹ In such cases, entry could presumably be forestalled at prices yielding only moderate or small long-run excess profits.

3. Easy entry, where the established firms enjoy small or negligible advantages of cost and where economies of scale are not important. Here an entry-forestalling price policy would presumably yield very small or negligible excess profits. (Simple implicit definition of these categories is not intended; in particular the lower limit of the middle class is tentatively placed where conditions of entry would permit no more than 3 or 4 per cent of excess profit on investment.)

Assuming that in general only moderate lags would be experienced in attracting new entry (and that the relevant time preferences generally are low), I advance the tentative hypothesis that in the first and the second cases, under any competitive pattern, established sellers will set price low enough¹² to forestall entry and will establish and maintain reasonable efficiency in scale and capacity, since in such cases the discounted long-run profit offered by this course is likely to be the greatest obtainable. Under easy entry, on the other hand, we may contemplate as alternative possibilities (1) long-run inefficiency with an excessive number of excessively small firms, (2) dynamically unstable market structure, with resultant inefficiencies, and (3) relatively good efficiency if price rivalry imposes it—and thus predict that in a

against the short-run monopoly profit maximization course whenever entry can be forestalled with some regular long-run profit. These two conditions would imply that a rather moderate barrier to entry would suffice to swing the balance in favor of an entry-forestalling price policy, provided that established sellers are not protected by very long lags in effecting new entry.

¹⁰ Cost advantages should presumably include those not only of production cost but also of selling cost, such as might arise from established product preferences for going firms, although the latter would be difficult to ascertain or measure empirically.

¹¹ Or where there are moderate advantages of cost to very large scale, etc.

¹² That is, collusive price should go no higher and under other competitive patterns this limit will not be exceeded and may not be reached or maintained.

significant proportion of such cases long-run inefficiency may be found. This hypothesis (which obviously rests upon a number of assumptions derived from casual observation) is itself conceivably verifiable if some measurement and rough quantitative classification of entry conditions are established, and I submit it for test.

A second hypothesis, derived from the preceding argument, is that there should be some association between the condition of entry and the price, profit, and degree of monopolistic output restriction within an oligopoly. This association is not necessarily a simple one, since such results depend not only upon the condition of entry but also upon the pattern of competitive behavior, which would not appear to be directly associated to the condition of entry. For given competitive patterns, however, certain conclusions emerge. With effective collusion throughout, very difficult entry should lead to high prices and profits and substantial monopolistic output restriction as sellers set that relatively high price which will maximize long-run profits while forestalling entry. By the same token, under moderately difficult entry collusive sellers must set a lower price and larger output and receive a lower profit to forestall entry. Easy entry, however, with the threat of entry presumably disregarded, should under persistent collusion give high price and restricted output, though with limited profits. Other competitive patterns, such as imperfect collusion and the kinked demand pattern, should lead on the average to lower than the collusive price in each case; so far as such lower prices are also systematically related to the respective collusive prices (as might be argued on certain assumptions) the preceding general comparisons should hold more broadly. Otherwise, the relation of condition of entry to price and profit is not clear, except that with only moderately difficult entry there is a relatively low top limit on such prices and profits. Under unmitigated price rivalry, of course, an approximation to competitive price and output, or even "destructive" pricing, could result regardless of entry conditions. The general comparison would indicate that within oligopolies the moderately difficult entry category should have the best workability rating, and the other two categories at least highly doubtful ratings.

Let us now return to the impact of market structure on the pattern of competitive behavior. A potentially significant—and not altogether unfamiliar—hypothesis here is that the degree of concentration of industry output among sellers will affect this pattern. Let us begin with a qualitative distinction between very high and moderate concentration in oligopoly—the first where a very high proportion of the market is controlled by a very few large sellers and where smaller firms are absent or quite few; the second where a more moderate proportion of

the market is controlled by a similar number of large sellers and where small- or medium-sized firms may be more numerous and control a moderate fraction of the market.¹³ Moderate concentration, it may be argued, should tend to give rise to quasi-competitive market behavior—imperfect collusion, kinked demand curve conformations, and the sporadic appearance of chaotic competition—whereas high concentration should provide an environment conducive to effective collusion or its equivalent. This hypothesis essentially rests on the premise and argument that given the incentive to joint profit maximization, the impediments to express or tacit agreement increase, while the restraint of recognized interdependence on independent price cutting should decrease (with ordinary frictions and imperfections) as concentration decreases, and at such a rate that a shift in competitive pattern results over a certain concentration zone within oligopoly. If this is so, then under given entry conditions industries of moderate concentration should have relatively lower average prices and profits and less output restriction than those of high concentration. Higher excess profits and more severe output restriction should tend to center more largely in the highly concentrated sphere, conditions of entry permitting. The preceding qualitative distinction, however, requires implementation in quantitative terms. Since *a priori* logic applied to available assumptions is of little help on this point, the crucial definitions can best emerge from statistical investigations. Here I will propose, on the basis of preliminary investigations, something like control of from 65 to 75 per cent of the market by eight or fewer sellers as a tentative dividing line.

The number and size distribution of buyers may also have some impact on the pattern of competitive behavior. The principal issue posed here is whether there will be significant differences among pricing in oligopolistic industries selling to many small buyers, a few large buyers, a few large and some or many small, etc. Although the *a priori* indications for bilateral oligopoly are not strictly determinate, it may be argued that high buyer concentration will tend to put pressure on the sellers of a sort which makes effective collusion among them more difficult, or otherwise reduces prices, especially if the seller oligopoly is not very highly concentrated.¹⁴ A substantial concentration among

¹³ It should be noted that the existence of some relatively small sellers is not necessarily inconsistent with conditions of very difficult or moderately difficult entry, nor with the forestalling of entry by going price policies. The impediments to entry may consist in absolute cost advantages over outsiders (as through patent or resource control) shared by smaller and larger established firms, rather than in dominant economies of scale. Even where such economies are dominant, small firms may survive on the starvation margin at a price which attracts no further entry, or geographical and other market imperfections may make a place for a limited number of smaller firms. Finally, it is always important to inquire to what extent the smaller firms in a "census industry" are actually producing in competition with the larger ones.

¹⁴ For example, the individual large buyer may be able to make price concessions in

buyers may therefore tend to be associated with lower prices and profit rates to the sellers, and conceivably with "destructively" low prices.

The remaining characteristic of market structure to be considered here is product differentiation, which may obviously influence the character of results emergent from a given competitive pattern. Posing a rough dichotomy between standardized products in the choice among which buyers are unresponsive to sales appeals (largely producers' goods) and products which can be effectively differentiated by some means, it may be suggested (1) that with differentiated products selling costs will tend to be larger under any competitive pattern than they would be with standardized products, (2) that although with differentiation significant selling costs may be expected even under non-price collusion, such costs will tend to be relatively larger in any pattern where collusion does not extend to the non-price level, and (3) that as we progress from difficult toward easy entry, selling costs may tend to increase, since they may be systematically employed to discourage entry. The potentially beneficial effects on price and output of a moderate threat of entry or of a noncollusive competitive pattern may thus be offset in some degree by an accentuated emphasis on selling costs. A priori appraisal of the seriousness of this adverse effect, however, is substantially impossible in our present state of knowledge.

The influence of product differentiation upon the pattern of competitive behavior emergent from an industry seems doubtful; it might be argued on certain premises that the outlet for rivalry on the non-price level may dampen any tendency toward severe price competition and may enhance the prospect for effective collusion on price. But I would hesitate to propose that differentiation should have a dominant influence on pricing; its principal concealed effect may be in heightening the barriers to entry.

The various hypotheses which I have tentatively advanced suggest that there may be some significant associations between market structure and the relative workability of results emergent from oligopolistic markets. In view of the nature of the underlying assumptions, they should evidently be viewed as setting forth general average tendencies rather than rigid rules. Although we have considered only a limited range of market structure characteristics and of significant results and although the only substantial defense of the hypotheses advanced must emerge from empirical test, it may be useful to inquire in terms of these predictions what composite market structures (combining various conditions of entry, number of sellers, etc.) would be relatively work-

violation of explicit or tacit collusive understanding very attractive to the individual seller; or collusion among buyers may be effective in breaking interseller collusion and even in imposing a more or less monopsonistic price.

able under oligopoly. Rather than developing a full market classification, I will simply summarize these predictions as they apply to what seem to be the most common categories in fact:

1. Oligopolies with blockaded or very difficult entry and a high concentration of sellers—not a rare case. In general these do not promise workability. Although reasonable efficiency may be expected, high prices and profits and substantial output restriction are forecast. If products are differentiated, selling costs may be excessive. Fewness of buyers, if present, may have a beneficial effect. (I will neglect moderate concentration with difficult entry on the ground that the case is evidently unusual, but in this case workability should still be definitely suspect.)

2. Oligopolies with moderately difficult entry and moderate concentration—probably a common case. In general, markets of this sort promise the closest approximations to workability among oligopolies, provided that there is not persistently “destructive” pricing, which seems theoretically unlikely as a long-run tendency. Efficiency should be reasonably good and prices and profits low or moderate. With product differentiation, however, selling costs may be excessive; thus standardized-product industries within this category get the best rating. Fewness of buyers may help, provided buyer power is not overwhelming. (If seller concentration is high, as seems less common, the rating is not substantially changed.)

3. Oligopolies with easy entry, high or moderate concentration. This category can give satisfactory results, but in general the prognosis is for at least equal possibility of unworkable efficiency, price, and output results, so long as the industry remains an oligopoly. (I have substantial doubts that easy entry is very common within oligopolies.)

In terms of these predictions, workability should perhaps be most strongly associated with the condition of entry to markets (although in a complex fashion); product differentiation per se does not promise to be an ameliorating factor, although fewness of buyers may be; workability may increase as concentration declines, but with obvious exceptions for selling costs, and subject to the dominant importance of entry.

The preceding hypotheses concerning the association of oligopoly market structure to workability of competition are of course tentative and rather speculative, but aside from their specific content, I believe that in attempting to develop them one becomes convinced that there may be in fact some such systematic and logically explicable association. In view of the variety of assumptions upon which one could proceed in a priori analysis, however, it is likely to be usefully established only by empirical investigation. The only test which I have so far carried through is between concentration and profit rate, and this

for forty-seven census industries selected on the basis of theoretical significance of concentration ratio and availability of profit data. Associating 1935 concentration ratio with 1936-40 average industry profit rate on equity (before taxes, from SEC data), it appears that whereas in twenty-two industries where 70 per cent or more of value product was controlled by eight firms, the mean annual profit rate was about 15 per cent, in seventeen industries where the concentration ratio was from 30 to 70 per cent, the mean profit rate was about 8 per cent. Although there is a considerable dispersion of profit rates within any concentration class, the interclass variation is dominant, and average figures show a break at about the 70 per cent line; below this, profits averaged substantially lower for all subgroups. This test is for a limited time interval, of course, and profits per se are hardly an adequate measure of workability. But it is possible that, if vigorous effort is given to the development of other essential data, we may establish the nature of practicable market environment most conducive to workable competition.

IGNORANCE AS A SOURCE OF OLIGOPOLY POWER

By TIBOR SCITOVSKY
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Before starting out to discuss ignorance as a source of oligopoly power, I should like to recall to you the meaning of oligopoly power. We think of competition as a force that tends to eliminate profits; and of monopoly or oligopoly power as something that restrains competition and thereby prevents the elimination of profits. Oligopoly power, therefore, is the power to restrain competition. Professor Chamberlin has shown that we must distinguish two kinds of restraints on competition. One of these is the obstacles to entry, which keep profits from attracting newcomers to a market and so prevent the elimination of profits by the additional competition of these newcomers. The other kind of restraint on competition is that imposed on the market behavior of established firms, which enables them to raise prices higher relatively to costs than they could in the absence of such restraints.

Both types of restraints may result from natural circumstances or be imposed by the deliberate action of a group of firms acting in collusion. When we talk about institutional or sociological causes of oligopoly, we have in mind factors that constitute natural restraints on competition or facilitate collusion to impose artificial restraints. In particular, a given factor may create natural obstacles to entry, natural restraints on competition among established firms; and it may facilitate collusion for deliberately imposing either or both types of restraints.

Technological economies of scale, for example, constitute a natural obstacle to entry; and they also facilitate collusion by keeping the number of competitors small. Buyers' ignorance and sales techniques catering to buyers' ignorance are perhaps an even more important source of oligopoly power. They, too, give rise to natural obstacles to entry; they, too, facilitate collusion by keeping the number of competitors small; and in addition they also impose natural restraints on competition among established competitors.

Marshall and his contemporaries knew that the degree of competition depended on the buyers' information; but they believed, falsely I think, that the buyers' information in turn depended on the organization of the market. They thought that buyers' information and competition were perfect in the international commodity exchanges, because these markets happened to be highly organized. This view explains their optimism about the future of competition. They expected buyers' information, and with it competition, to increase as a result of the improvement of the technical means of communication and market organization.

Today, looking back on historical developments, it would seem that this view was wrong. In fact, I should say that the very opposite of Marshall's view is correct. I should regard the buyer's information as cause and the market's organization as effect; and I believe that the market's perfection depends on the buyer's expertness. For it is only the expert buyer who insists on comparing rival products before every purchase; and it is only his insistence on making comparisons that forces the seller—or rather makes it profitable for him—to make his product easily comparable to competing products. Hence, the geographical concentration of the expert's market and the grading and standardization of products in such a market should not be considered data, as Marshall did. They are the result of a deliberate effort on the part of producers; and I believe that such an effort will only be made in the expert's market, in response to the expert buyer's demand for easy comparability.

On this view, of course, which regards market organization and the standardization or differentiation of products as variables that depend on the buyers' information, one cannot share Marshall's optimism about the future. The expert buyer has always been an exception; and the consumer is not only an inexperienced buyer but the increasing complexity of consumers' goods is constantly increasing his ignorance.

But how and in what sense does the buyer's ignorance restrain competition? We know that the expertness of buyers leads to standardization, which implies that when the buyers are inexperienced, the inducement to standardize is absent. We can even go farther than this. It can be shown that in the ignorant market every producer finds it profitable to differentiate his product, not indeed in any objective sense of the word, but by playing on the buyer's ignorance and creating the impression in one way or another that his product is different from competing products. Such differentiation lowers demand elasticities and makes higher profit margins possible; but this, while it lowers competition, is probably a very minor factor, which can hardly be called a competitive restraint. For a discussion of further restraints, however, we must first ask ourselves how exactly the ignorant buyer behaves.

An ignorant buyer is a person who is unable to judge the quality of the products he buys by their intrinsic merit. Unable to appraise products by objective standards, he is forced to base his judgment on indices of quality, such as the price of products and the size, long-standing and general reputation of the producing firms. Moreover, aware of the shaky basis and insufficiency of his judgment, the ignorant buyer dare not rely on his judgment alone and falls prey to the emotional suggestion of advertising.

That this type of consumer behavior is important in many markets

needs no proof. But how does it give rise to oligopoly power? It is apparent to begin with that the ignorant buyer's inability to appraise the quality of goods on their own merits deprives the producer of the inducement to engage in quality competition. For it is pointless to offer improved quality to customers who cannot distinguish good quality from bad. Similarly, the ignorant buyer's habit of judging quality by price weakens also price competition. For the offer of a lower price will largely defeat its purpose in markets where a low price is regarded as a sign of inferior quality. In such markets a price change will lead few buyers to transfer their custom from one producer to another. Hence, the price elasticity of demand will be low in such markets. It may be almost as low as it would be if collusion among rival producers had suspended price competition among them.

Needless to say, consumers' ignorance is never absolute; and they never judge quality by price alone. Accordingly, quality and price competition are limited rather than totally absent in the ignorant market; but such limitation may be substantial and give rise to very high profit margins.

When quality and price competition are limited, other forms of competition tend to be intensified. Hence the great importance of advertising and of new models and eye-catching features in the uninformed market. These forms of competition, however, can never replace price and quality competition fully; and the lowering of price and quality competition lowers competition in general. Moreover, since advertising and other such competitive weapons are obviously wasteful and socially undesirable, their preponderance in modern society has considerably weakened people's belief in the usefulness of competition. Competition by such methods may be no easier to limit by collusion than price and quality competition; but public opinion is certain to be less opposed to collusion in restraint of such forms of competition.

The limitations on price and quality competition in the uninformed market are what may be called the natural restraints on competition among established competitors. But the main manifestations of oligopoly power are restraints on potential competition from newcomers. Such restraints are due in the uninformed market to the importance of advertising, service, and good will.

I need not enlarge here on the fact that the importance and efficacy of advertising increases with the market's ignorance. But the importance of advertising would not, by itself, discriminate against newcomers if it were not for the fact that advertising seems to yield increasing returns to scale. This means that as far as the effectiveness of advertising is concerned, the large firm has an advantage over the small firm, and the new firm must operate on a large scale from the outset if it is

to compete on equal terms with established competitors. In other words, the need for advertising in the uninformed market creates the same protection for established firms and the same obstacles to the entry of new firms as the existence of technological economies of scale.

A further and very similar obstacle to entry in the ignorant market is due to the importance that the buyer of durable goods attaches to the provision of repair and maintenance services by the producer from whom he buys. The need for such services is created, of course, by the technical complexity of durable goods. But the consumer's insistence that such services be provided and guaranteed by the producers themselves is to a large extent due to consumers' ignorance. For the ignorant buyer knows no more about the nature, availability, and quality of the services his car and appliances need than he knows about the quality of these products themselves; and he often believes, and is led to believe, that each brand of product requires special service. He wants an expert's assurance that adequate repair service for the product he buys will be available; and he believes that the best assurance he can get is the producer's guarantee to provide such services himself. Hence the consumer's preference for the products of manufacturers who can offer him repair and maintenance service as well. But the provision of services, just like advertising, yields increasing returns to scale; which means that the importance the uninformed consumer attaches to them creates the same advantages for the large and obstacles for the new firm as the importance of advertising and the technological economies of scale. It is worth mentioning in this connection that the marketing difficulties encountered in this country both by Kaiser-Frazer and by the British motorcar manufacturers have stemmed mainly from this source.

But by far the most important obstacle to entering the uninformed market is the ignorant buyer's habit of judging products by the size, age, and reputation of the manufacturing firm—in short, by the good will of the firm. Given his inability to appraise goods on their own merit, this may be the most rational thing that the buyer can do; but it gives a very important advantage to the large firm over the small and to the established producer over the unknown newcomer. The more ignorant are the buyers and the more their ignorance forces them to rely on the producer's good will for judging the quality of his products, the more important becomes this type of discrimination.

The established firm's advantage over newcomers is due to the mere fact that it is already established and that therefore its name is known and it has established trade connections and an established group of customers. The importance of this advantage is measured by the high price that is sometimes asked and paid for the mere use of a name or

trade-mark. In fact, the price for which established good will is bought and sold may be regarded as a measure of the value of oligopoly power that is due to buyers' ignorance.

A new firm, of course, need not buy an established good will; it can always create a new one. A new name and a new reputation can be built up from scratch; but in the uninformed market this may take a major advertising campaign. In either case, therefore, a newcomer must pay for his good will. This payment represents a kind of entrance fee to the ignorant buyers' market; and the existence of this entrance fee protects the oligopoly profits of established firms.

Manufacturers are often aware of the fact that the security of their oligopoly position depends on and increases with the ignorance of their customers. At least they often pursue an advertising policy that seems deliberately aimed at impressing the consumer with his own ignorance. Hence the stress in some advertisements on the technical or chemical complexity of products. Hence the emphasis on the need for costly research and elaborate testing equipment for maintaining high standards of quality. All such advertising carries the suggestion that the consumer, a mere layman, would be unwise to judge quality unaided, by mere inspection, and should rely instead on the guarantees offered by the reputation of established manufacturers. The same idea is expressed more succinctly in the advertisements that enjoin the consumer to buy only the products of reputable firms or to buy only nationally advertised goods.

To sum up the above argument, consumers' ignorance creates oligopoly power and oligopoly profits in three ways: it limits price and quality competition among established firms, it protects these firms from the potential competition of newcomers by setting a high entrance fee to their market, and it facilitates collusion by limiting the number of established firms. When one recalls that the decline of price competition and the increasing cost of good will are among the main trends in recent economic development, one realizes how important a source of oligopoly consumers' ignorance is. In fact, one may wonder why this factor has received so little attention in the past. One probable reason is that very little can be done about it. The consumer's ignorance is not something that he need be ashamed of. To a very large extent it is the inevitable result of our highly technical civilization. Another reason is that very often we think of the producer's profit not as the result of his exploiting the ignorance of his customers but as the well-earned remuneration of his expertness. For example, if I buy a painting in an art gallery, the price I pay is bound to be very much higher than the price received by the painter. Out of the difference come the gallery's profits; and as an economist I am trying to explain these profits. Should

I regard them as the gallery's fee for having made an expert appraisal of the painting; or should I say that the gallery is exploiting my lack of artistic judgment, which prevents my going directly to the painter in Greenwich Village for fear of making a fool of myself and a financial blunder in addition?

The first explanation is undoubtedly more attractive; but there is one trouble with it. How do I know that the gallery has exercised expert judgment and has exercised it for my benefit? If I think so mainly because it has an imposing shop front and thick carpets, then the second explanation is likely to be more correct—and it certainly is the more honest one.

COLLUSION AND ITS LIMITS UNDER OLIGOPOLY

By WILLIAM FELLNER
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The kind of "collusion" characteristic of oligopolistic market structures does not require direct contacts between rival firms. Consequently, collusion is not a particularly well-chosen word for expressing what we should here have in mind. It was used in the title to avoid unfamiliar terms. But it should be realized that oligopolistic co-operation may stem largely from the spontaneous co-ordination of business policies, and that it does not presuppose direct contacts, or collusion in the sense proper. Oligopolistic co-operation may, of course, develop from direct contacts and from explicit agreements as well as from the spontaneous co-ordination of business policies. In the real world spontaneous co-ordination shades over into explicit agreement by gradations. In most cases it would be impossible to draw a sharp line between the two. Yet proper understanding of the oligopoly problem requires placing the emphasis on the fact that on oligopolistic markets there exists a strong tendency towards the spontaneous co-ordination of business policies.

The reason for this tendency is that oligopolistic situations are bargaining situations in the broad sense. The essential property of bargaining situations is that they involve two or more participants who know that what they do (individually) affects the policies of the others, just as the individual policies of the others affect them. All bargaining situations in the ordinary sense possess this property. Bargaining situations in the ordinary sense also possess the further property that they lead to direct negotiations. But assuming away direct negotiations does not eliminate the fundamental characteristic of a bargaining situation. For, even without direct contacts, the moves of each participant will show his reaction to what the others have been doing, and, at the same time, whatever a participant does will help test the reactions of the others. Hence, the moves of the various participants assume the character of offers and of replies to offers. Even in the absence of direct negotiations we are faced with bargaining in the broad sense, as long as each participant is appreciably affected by the individual moves of the other participants.

Bargaining in this broad sense is an inevitable feature of oligopolistic markets. It does not follow by logical necessity that such "bargaining in the broad sense" will always result in the co-ordination of business policies. It may not, just as bargaining in the narrower sense—bargaining with direct negotiations—may fail to result in direct agreement.

But it is an empirical fact that bargaining in the ordinary (narrow) sense usually does lead to agreement and there exists a strong presumption that bargaining in the broad sense usually leads to a substantial degree of spontaneous co-ordination. Failure to reach agreement, or to reach spontaneous co-ordination, would have to be interpreted as resting on mutual errors committed by several participants at the same time. For, within a range of possible outcomes, each participant has an interest in reaching an "agreement," even at the expense of concessions. Failure to do so would have to rest on mutually incorrect appraisal of one another and on a degree of obstinacy which precludes correcting this appraisal. Such may sometimes be the case, especially in so-called "immature" situations where the participants may be quite unfamiliar with the objective and subjective characteristics of their rivals and of the market. But, aside from perpetually incorrect mutual appraisal, a substantial degree of spontaneous co-ordination will result.

On atomistic markets, failure to co-ordinate business policies is, of course, not a consequence of incorrect appraisal. Each participant knows that whether the others deviate from restrictive arrangements does not depend on whether he deviates and, hence, each participant has good reasons to deviate (which is another way of saying that restrictive arrangements will not develop unless an outside agency imposes them upon the group under penalty). In an oligopolistic group each participant knows that the moves of the others do depend on how he acts and this is why perpetual lack of co-ordination would here have to be interpreted as a consequence of perpetual misjudgment.

The co-ordination of business policies in oligopolistic groups falls short, however, of the establishment of monopolies. This gives rise to the central problem of oligopoly theory. Why is oligopolistic co-ordination incomplete? Why do oligopolistic industries not establish and exploit a single pool of resources? What are the effective limits of spontaneous co-ordination and of collusion in oligopolistic market structures? These, it seems to me, should be considered the main themes of oligopoly theory.

Needless to say, it is impossible to make a simple general statement on the effective limits of oligopolistic co-ordination. The limits will be different in different markets. They will depend on general characteristics of economies as well as on specific characteristics of markets. But while there exists no simple theory of the effective limits of collusion, it should be possible to describe a limited number of main properties with respect to which oligopolistic groups behave "more so or less so." Whether they behave more so or less so decides the degree of co-ordination in these groups. Such a theory should make it easier for factual inquiries to proceed in a systematic fashion. But only factual

inquiries—market studies—can tell us which oligopolistic groups behave “more so” and which “less so” with respect to certain basic properties. Only factual inquiries can tell us what the actual degree of co-ordination appears to be in different markets.

The effective limits of co-ordination are different in various oligopolistic markets but the limiting factors may be said to stem from one main source in two different ways. The limits to co-ordination stem from the likelihood that the relative bargaining strength of the participants will change in an unpredictable manner. It is possible to agree on present relative strength but it is impossible to agree at present on the unpredictable future relative bargaining power. This, it seems to me, is the main source of the factors which limit oligopolistic co-ordination. In fact, this would be the only cause of these limitations if we could exclude the possibility that the participants might struggle even over the “present” relative strength. This possibility should not, however, be excluded because the testing of present relative strength may sometimes be unavoidable. The testing of present relative bargaining power may even extend over longer periods of time and, hence, the unpredictability of future strength is not the only reason why oligopolistic co-ordination is incomplete. But it appears to be the main reason.

There are two ways in which the consistent recurrence of unforeseen change blocks complete co-ordination. In the first place, it is usually necessary to leave outlets for these changes. This introduces a qualification to joint-maximization of earnings because these outlets consist of mutually accepted and recognized competitive behavior in certain specific respects. Secondly, these outlets may prove insufficient: a fight may break out in spite of them. This is well known to all participants and it makes it necessary to stay armed. This, too, introduces a qualification to joint-maximization because the complete pooling of resources implies far-reaching disarmament of the participants in relation to one another. Let us first turn to the competitive outlets, and subsequently to the methods of staying armed for the event that a fight should break out in spite of the outlets.

The competitive outlets make it possible for a firm to improve its relative position within the group if it shows superior skill in certain respects. Cost-saving innovations, product variation, and new advertising may give rise to such outlets. This means that the firms mutually approve of the individual (rather than joint) handling of these variables. Consequently, co-ordination is incomplete in these respects. Complete co-ordination would imply the complete pooling of resources. Under such a regime, innovation, product variation, and new advertising would be carried to the point where the joint profit is maximized, and each firm would receive a definite proportion of the joint profit. If any

firm violated the established pattern of behavior, this would give rise to retaliation and to cutthroat price competition. But if the individual handling of the "dynamic" variables is mutually accepted, then of course no cutthroat retaliation ensues, although each firm must know that its rivals will also do their best to improve their position by the appropriate handling of these same variables. This will ordinarily lead to more cost-saving innovation, more product variation, and more new advertising than would appear justified to agencies operating a single pool of resources. The question of how much more depends on the degree of individual freedom which is mutually accepted. In other words, the magnitude of the deviation from the principle of joint-maximization depends on how competitive the handling of the dynamic variables is. One extreme would be that of no constraints whatsoever on the individual handling of these variables; the other extreme would of course be the complete pooling of new technical knowledge and skills of all sorts. It seems clear enough that most real cases lie between these two extremes. Oligopolistic firms do not usually exploit pools of new skills with the sole purpose of maximizing the joint gain. Individual participants may exploit their own new skills—they may improve and vary their products—partly in view of gaining at the expense of others. But it is very likely that in the typical case certain constraints are observed and that failure to observe these would result in cutthroat retaliation. This is one of the problems of "more so or less so" to which I referred earlier. Factual inquiries are needed for "placing" a definite oligopolistic group with respect to the degree of individual freedom and of constraints, by which the handling of new skills is characterized in each specific case.

Ultimately the matter depends on the degree of overconfidence with which some firms view their own ability of acquiring new skills. Failure to pool is always the consequence of the overconfidence of some participants, since *ex post facto* it is always possible to describe a pooling and profit-sharing arrangement by which the relative position of each firm would have been set in precisely the fashion in which it actually developed and by which each participant would have earned higher profits. Some firms turn out to have been overconfident and thereby to have reduced the profits of each firm, including their own. Consequently, there exists some likelihood that experience will teach the group a lesson and that in a given group the handling of the dynamic variables (cost-saving devices, product variation, new advertising) will gradually tend to become less competitive. But a *a priori* analysis in itself does not lead to conclusive results because in certain cases the experience of, say, ten or twenty years may not contain sufficient indication as to the likely changes in relative skills over the subsequent period

of equal duration. Moreover, groups do not remain given in the relevant sense. Their composition and their characteristics change. The fact remains that agreement on future changes in skills is a different matter from agreement concerning relative strength as of now.

Competitive handling of cost-saving devices, product variation, and advertising creates outlets for unforeseen changes in bargaining strength. These competitive outlets for new skills reduce the likelihood of cut-throat competition but they do not exclude its possibility. It is necessary to stay armed; that is to say, to be able to defend oneself against aggressive moves of rival firms and to undertake such moves if this is called for. Therefore, the objective of joint maximization will be approximated less closely than would be the case if only the unforeseen new skills were handled on a quasi-competitive basis and if pooling were complete on the static level. Pooling is usually incomplete even on the static level because a firm must retain a substantial degree of independence to be able to defend its position in the event of cutthroat competition. This is the main reason why groups do not usually reduce their costs by reallocating output between the participating firms and why they frequently try to obtain maximum market shares with no direct compensation from other firms rather than maximum profits via direct compensation from the most efficient participants. They are reluctant to substitute contacts with their rivals for contacts with the market because this places them at a disadvantage in the event of a future fight over relative strength. Here again we are faced with a matter of "more so or less so." The reluctance to disarm for the sake of higher present profits may be different in different cases and, therefore, the relative emphasis on market shares in contrast to profit shares may also be different. This kind of theorizing may try to direct attention to the relevant features of the oligopoly problem but it is of course no substitute for detailed factual analysis.

The analysis so far developed makes it possible to express a general opinion on certain problems of policy. Some conclusions which can be derived from the analysis are apt to sound pessimistic and yet they need not be sterile. These conclusions relate to the limits of what may reasonably be expected from antitrust policy. At the same time they point to avenues on which it may be possible to move a considerable distance toward desirable objectives, while the avenues chosen without regard to the existing limits are likely to prove blind alleys.

The limits are set by the fact that in oligopolistic markets a tendency toward the spontaneous co-ordination of business policies seems inevitable. It is impossible to force rival firms to disregard the effects of their moves on one another. No one can be forced to behave as if he possessed less intelligence than he really does. Specific manifestations of

oligopolistic co-ordination can be suppressed. But in each case where this is done, it is necessary to ask the question as to what other manifestations of oligopolistic co-ordination are likely to show if certain business policies are outlawed. It seems to me that legal practice has not so far been guided by this general principle. In legal quarters, increasing attention is being given the fact that market results may prove the existence of oligopolistic co-ordination, even where there is no explicit agreement or collusion. Recent articles in law reviews and also some recent court decisions show this clearly enough. Yet recognition of the fact that market results may prove the existence of spontaneous co-ordination is insufficient as a basis for policy. In principle, there exist two ways in which a sufficient basis for policy may be obtained. Actual market results may be outlawed and the competitive market result (e.g., pricing at the competitive level) may be prescribed. Legal practice has shied away from this solution; in my opinion rightly so. Ultimately such a policy would require all-around administrative price setting at the "competitive" level. The authority possesses neither the power nor the information (knowledge) which is necessary to carry out such a program in the best interest of the community. Furthermore, I do not believe that a policy of comprehensive administrative price setting could be carried out in the institutional framework of a private enterprise economy and of a political democracy. This, however, may be a controversial proposition, and therefore I will repeat that, in principle, prescribing specific market results is a logical policy. If such a policy is not adopted, outlawing definite market results is a logical policy, provided that the alternative market results which, in this case, the oligopoly in question is likely to adopt are socially more desirable than those which are suppressed. However, to suppress certain market results merely because they prove the existence of oligopolistic co-ordination is a half-baked policy which probably rests on the incorrect assumption that by outlawing certain symptoms of co-ordination it is possible to force oligopolists to behave as if they were not aware of their mutual interdependence. In reality they remain fully aware of their interdependence. Unless the basic characteristics of the market structure itself are changed, the objectionable market results will be promptly replaced by different but equally oligopolistic results. A policy which is directed against specific manifestations of oligopolistic co-ordination and which does not prescribe definite market behavior must examine the economic consequences of the alternative patterns which it calls into existence when suppressing certain practices. Otherwise it is likely to do more harm than good.

So far the conclusion is that, given the main characteristics of an oligopolistic market structure, interference with actual business be-

havior must be based on the comparison of the economic consequences of alternative oligopolistic business policies. Suppressing definite oligopolistic practices implies favoring other equally oligopolistic practices. My reasoning assumes that the interference in question does not increase the number of competitors materially. It assumes that the basic characteristics of the market structure remain unchanged and merely certain methods of pricing or certain methods of market sharing are declared illegal.

Increasing the numbers of competitors is a different matter. The broadening of oligopolistic groups is likely to loosen the co-ordination of business policies, especially with respect to the market variables other than price. Technological progress, including product improvement, is likely to remain more competitive in broader oligopolistic groups. Restrictions pertaining to these activities assume agreement on relative skills and thereby on the appropriate discounting of future relative strength. Such agreement is likely to be less complete in broader than in narrower groups.

The policy of broadening the existing market structures is, of course, also subject to limitations. Wherever the actual degree of concentration results exclusively from real-cost advantages (social-cost advantages) of large size, a policy of reducing the degree of concentration cannot help raising the social cost at the time when the interference occurs. This does not necessarily imply that such a policy is always wrong, but it would be difficult to indicate how this disadvantage should be weighed against other possible advantages of reduced concentration. However, where the existing degree of concentration is partly the consequence of the exclusion of technically efficient potential entrants, no such dilemma arises. It is certain that the actual degree of concentration in the American economy is partly the result of such "artificial" exclusion. Artificial exclusion may even be largely responsible for the existing concentration. Suppressing artificial exclusion is an unequivocally desirable objective, except where some degree of exclusion is deemed to be necessary to stimulate inventions or to reduce an excessive degree of uncertainty. In general, artificial exclusion is an unequivocally objectionable practice. It requires specific and detailed justification wherever it is tolerated or fostered.

Some economists feel that in legal quarters the concept of artificial exclusion has been overworked. On the whole, I disagree with this view. The weakness of antitrust policy has not been that it has overworked the concept of artificial exclusion but that it has interpreted the concept too narrowly. At present there seems to exist a tendency toward broader interpretation and this is a hopeful sign. It should be recognized that all exclusion of potential entrants is "artificial" in the relevant sense if

it is not the result of lower real costs (social costs) of the existing firms. A program aimed at suppressing artificial exclusion in this broad sense is better suited to loosen oligopolistic co-ordination and to increase the degree of competition than any other specific policy.

The special requirements of suppressing (or of significantly reducing) artificial exclusion in the broad sense are complex. I will mention here only a few. It would be necessary to examine systematically not only the "vertical" arrangements existing between institutions operating at different stages of the structure of production but also the methods by which vertically integrated firms deal with nonintegrated outsiders. It would be necessary to examine the conditions of capital supply with which potential entrants are faced and to create alternative sources of credit. It would be necessary to examine the effect of specific advertising and selling techniques and of specific price policy on the degree of concentration. If policies directed against artificial exclusion in the broad sense could be carried out with complete precision, no direct interference with size might be required because the remaining degree of concentration would be exclusively the result of real-cost advantages. The remaining oligopoly power could not be exploited beyond limits set by real-cost advantages, since at these limits entries would occur. But policies of this sort can never be carried out with complete precision and, hence, there is much to be said for the direct prevention of economically unjustified mergers.

This is not intended to be mainly a paper on policy. I merely wanted to emphasize a conclusion which can be derived from general economic analysis. Preventing such concentration as is not justified by real-cost advantages is a very much more promising line than trying to force oligopolists to behave as if they operated in atomistic competition. The success of such a policy depends, of course, on how much concentration is artificial in the broad sense in which the word is used here. Considerable reduction of technologically justified concentration is probably not a practical objective because, in the long run, no society is capable of organizing itself with deliberate inefficiency. But the evidence now available does not compel us to take the defeatist attitude that, owing to technological circumstances, the degree of concentration must become intolerable. It is questionable whether oligopolistic concentration has increased considerably since the first World War; and no one knows how much of the present degree of concentration is "technologically justified." All we know is that concentration is high in a good many significant industries, and we have reasons to assume that a considerable part of it is not "technologically justified" or even justified by real economies of large-scale selling.

The problems raised by oligopoly are vital. The proper functioning

of free institutions depends mainly on three conditions: opportunities must not become limited to members of narrow groups, technological and organizational improvement must proceed at a substantial rate, and violent economic fluctuations must be avoided. Where private enterprise economies do not perform reasonably well in these three respects, free institutions will scarcely survive. The oligopoly problem is vital because it bears significantly on all three objectives.

DISCUSSION

GEORGE J. STIGLER: The theory of oligopoly has usually been developed within a framework of three assumptions. The first is that the oligopolists are individually to maximize profits. The second is that monopoly yields maximum profits to the industry. The third is that the profit-maximizing oligopolists do not engage in complete collusion and act like a monopolist. The problem of oligopoly becomes: how can we limit the profit maximization of the oligopolists so that it does not lead to monopoly behavior?

The early writers placed easy but wholly arbitrary limits on the profit maximization of each oligopolist. Cournot, for example, had each oligopolist maximize profits subject to fixed outputs of other firms. In the course of time these arbitrary limits to profit maximization have been relaxed, and the oligopoly equilibrium (or the range of possible prices) has approached closer to monopoly equilibrium. The most recent and reasonable stopping point short of complete collusion is that proposed by Fellner, at this session briefly, and in his recent volume more elaborately. He finds pooling of profits necessary to complete maximization, and deems pooling impossible for reasons of long-run uncertainty of the relative strengths of firms and because of anti-trust policy. Fellner's stopping point is also arbitrary and rests on too literal a view of pooling. It is possible to pool by dividing market areas, by dividing products, by asymmetrical patent royalties—by many devices of variable durability and detectability.

Of course any stopping point on the road to full collusion will necessarily be inconsistent with profit maximization; that is, the stopping point will be non-rational. The inconsistency is assured by the formulation of the problem, which requires a rational explanation for an irrational policy.

There are in fact two serious objections to the conventional formulation in terms of how will firms A and B treat one another. One objection is that the formulation leads to arbitrary, nonrational answers, no one of which seems plausible to more than its sponsor and his close friends. The other objection is that we have very little evidence that A and B fail to treat each other with the utmost kindness.

Perhaps we should change our line of attack. One alternative formulation is: Why do firms A and B constitute the industry, and how long will they enjoy this position? That is, what are the conditions of entry of new firms and expansion of existing firms in an industry? I suggest that when attention is turned to this question, oligopoly behavior loses much of its arbitrariness and oligopoly price much of its indeterminacy. If the existing firms are there because of strong patents, we should expect full collusion, until recently carefully spelled out in the cross-licensing agreements. If the existing firms are there because of ownership of limited natural resources—a case more popular than important—we should expect a similar result. If the large firms are there by merger, the case I argued was most important; their policies are governed by the factors determining the rate of entry and expansion of rivals. This formulation does not completely eliminate the classical oligopoly problem, but it reduces it to a minor aspect of a more manageable problem.

I am encouraged that Bain is also giving entry and expansion of rivals an increasingly important role in oligopoly theory. His present position does not crowd mine, largely because he discusses long-run equilibria where I discuss a path to long-run equilibrium. I infer that in Bain's view, mergers that did not maintain their relative share of the industry's output represent unsuccessful attempts at monopoly, while in my view, had they maintained their relative positions they would not have obtained monopoly profits. An independent point on which I solicit examples and amplification is Bain's opinion that very easy entry into an industry will often make it unworkably competitive.

There is much instructive analysis in Scitovsky's paper, but I cannot (any longer) convince myself that consumer ignorance is a basic element of the oligopoly problem. By his reading, we should expect only sporadic and minor quality improvements—and fairly frequent quality deterioration—in the oligopolistic industries. The evidence is all the other way: the main trend of quality change has been toward improvement, and it has been a strong and continuous trend. The basic limitation on consumer ignorance is producer knowledge. Until it can be shown that advertising has generally decreased cross-elasticities of demand or introduced economies of scale, in the theory of oligopoly I shall continue to be more impressed by the ignorance of economists than by the ignorance of consumers.

JOE S. BAIN: In his paper, Professor Stigler has set out to rework the economic history of the American merger movement and to draw some policy conclusions from his revised history. A very familiar and to me quite convincing explanation of the merger and concentration movement would suggest that merger activity or the development of concentrated market structures generally was encouraged over the relevant time interval by a number of things:¹ (1) some significant potential production economies to large scale of plant or firm, offered by evolution in production technique or organization; (2) some significant advantages of large-scale distribution, advertising, and sales promotion (both sorts of economy or advantage favoring scales large enough to foster high concentration); (3) the acquisition by one or a few firms of strategic control of patents or of resource supplies (initial control could engender concentration from the outset, or pursuit of such control could favor merger); (4) the fact that developing transportation systems intensified competition and also made greater centralization of production economical; (5) the pre-existence of a presumably persistent drive to limit or eliminate competition; (6) the liberalization of incorporation laws and the development of security markets; (7) the lure of financial profits in promoting mergers; (8) the canalizing influence of the antitrust laws. Interpreting the observed evolution of market structures within this framework, a number of commentators have suggested that no single factor would explain all or most mergers, and that most of them probably occurred for a number of good reasons.

Professor Stigler modifies this standard argument by emphasizing certain

¹ See, e.g., A. R. Burns, *The Decline of Competition*, Ch. 1.

of its hypotheses and by rejecting or neglecting as unimportant the others. Advantages of large scale of all sorts are heavily discounted; patent and resource control are neglected or held to be of minor importance as the aim of merger, the pivot for merger, or the defense against entry; the development of transport systems is not evaluated as a potentially strategic technological change. Neglecting these factors, the merger movement appears to have resulted largely from the simple drive to monopolize or oligopolize industries which were and could just as efficiently have remained atomistically competitive—a drive which was timed as it was because of exogenous institutional changes in corporation law and in the stock market and which took the channels it did because of the existence and evolving interpretation of the anti-trust laws. It is implied, moreover, that concentrated industries (at least if they became concentrated by merger) generally did and continue to have easy entry for smallish firms and thus have unstable market structures which continually tend (or would with a little encouragement) in the direction of atomism and competitive pricing.

This thesis is certainly simpler than others, and it is possible to find some evidence of market structure evolution which is consistent with it. But it is also true that there is a good deal of evidence which is not so consistent, and that some of that which is adduced in support of the thesis is not conclusive or could be equally consistent with other theses.

To take the latter point first, the survival of some small firms in a group which the census calls an industry is not conclusive evidence that there are negligible advantages to large scale and that there are no significant artificial barriers to entry. Some small firms with significant disadvantages of small scale may survive on the starvation margin, while entry remains unattractive; geographical or other market imperfections may make it possible for small firms to succeed in supplying limited corners of the market while the mass markets could be successfully supplied only by large-scale producers; the small firms in a census industry may be producing different products than the major firms. As to artificial barriers, existing small firms may share in their advantages, perhaps as dependencies of large firms, though entry is effectively impeded.

A related point is that the decline over some time interval in the proportion of the market controlled by the largest firm in some industries hardly proves that, even there, there were or are no strategic advantages to scale or that there has been persistently easy entry. In a considerable proportion of cases where the dominant firm's share of the market declined, its absolute output grew or remained stable. The implied growth in industry demand, moreover, may have created temporarily favorable entry conditions, which vanished as the rate of growth of demand diminished. And the fact that, as observed, smaller firms later merged to accomplish more concentrated oligopoly is at least consistent with the existence of advantages to large scale. Finally, the progressive development since the initial great wave of mergers of artificial barriers to entry or of advantages of large scale—in either production or selling—is a possibility to be seriously explored. If a number of the early mergers did reach a market share which for a variety of reasons they did not maintain, it does not follow from many premises that advantages to

very large scale or artificial barriers to entry were insignificant in such markets after, let us say, 1920.

To turn to other evidence, such as it is, there are qualitative indications in a large number of oligopolistic industries that entry is impeded to a significant extent (1) by production economies of large scale, or (2) by substantial advantages of large-scale sales promotion (which accumulate over time to build very strong positions), or (3) by patent control, which is likely to be perpetuated via large-scale research—and that any or all of these make it quite difficult for small firms to compete away much of the business of the large established ones. However important these barriers were in 1905, they seem quite important now. I hold no brief for the dominant importance of production economies of large scale, but these are only one of several potentially important sources of impaired entry conditions.

Second, I am not aware of any evidence that points to a significant general decline in concentration within industries of oligopolistic structure since the middle twenties. Admittedly, the available evidence is too sketchy to support any sweeping conclusion on developments in the last twenty-five years, but what is available would indicate a variety of patterns, with concentration increasing, declining, and constant. There is no general indication that declining concentration has been generally avoided only by continually merging with new entrants as they appeared. This is consistent with the hypothesis of a variety of entry conditions and of situations of advantage to scale, within an economy subject to continual dynamic changes in technique, product, and size of industry demand. If the proportion of the market controlled by one firm has declined over some interval in such industries as steel, agricultural implements, and others cited by Professor Stigler, the proportion controlled by the largest four to eight firms in a great many industries remains high, and, although in some cases it was once higher, on the average does not appear to have been declining significantly for some time. Attention might be turned to automobiles, cigarettes, typewriters, adding machines, synthetic yarns, firearms, gypsum products, photographic equipment, railroad cars, locomotives, soap, fountain pens, copper and zinc, linoleum, light bulbs, spark plugs, storage batteries, radio tubes, aircraft, tires, a number of chemical industries, and many others to determine if there is any general secular tendency toward easy entry and persistently declining concentration.

Considering such evidence as I have seen, I am reluctant to accept without qualification Professor Stigler's assumptions about advantage to scale and free entry, his rationale of the merger movement, or his implied predictions of structural instability in oligopolies. His pattern probably fits part of the cases at least part of the time, but the rest of the cases are numerous and very likely in the majority. For them, different assumptions may be appropriate and concentration may have a more complex rationale—so much more so that Professor Stigler's oversimplified explanation is misleading. Strictly production economies of large scale may not play a dominant role in encouraging and maintaining concentration, and easy entry would indeed be desirable in many cases, but it does not follow that we usually have it.

CAPITALISM AND MONOPOLISTIC COMPETITION: II. CAN THE AMERICAN ECONOMY BE MADE MORE COMPETITIVE?

ON THE ALLEGED UBIQUITY OF OLIGOPOLY

By CLAIR WILCOX
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In his chapter on "Monopoly and the Concentration of Economic Power," in *A Survey of Contemporary Economics*, Professor Galbraith asserts that "the dominant market of modern capitalism is not one made up of many sellers offering either uniform or differentiated products. Rather it is a market of few sellers." Oligopoly, he concludes, is "by all evidence the ruling market form in the modern economy." And in the following chapter on "Price and Production Policies," Professor Bain speaks of "the ubiquitous category of oligopolistic industries" in "our predominantly oligopolistic economy" and agrees that oligopoly "in fact comprehends the great majority of actual cases."

The evidence that is usually cited in support of such generalizations consists of a number of statistical studies published during the last twenty years that have revealed the existence of substantial concentration in the hands of a few large firms of the assets of all nonfinancial corporations, of employment and output—industry by industry—in manufacturing, and of the output—product by product—of manufactured goods. It may be doubted, however, that any of these studies affords a basis for definite conclusions concerning the relative significance of oligopoly in our economy.

Let us take first the concentration of corporate assets. According to Berle and Means, the 200 largest among some 300,000 nonbanking corporations controlled 49 per cent of nonbanking corporate wealth in 1929. And according to the National Resources Committee, the 200 largest concerns controlled 57 per cent of the assets of all nonfinancial corporations in 1939. But in each case the list of 200 giants includes as many as 111 that could scarcely be classified as oligopolists. Among them are 94 or 95 public utility and transportation companies whose rates are regulated by public authorities, 3 or 4 companies possessing complete monopolies in mining or manufacturing, and 13 engaged in such competitive enterprises as retail distribution and the manufacture of lumber, shoes, and textiles. This leaves only 89 as candidates for inclusion in the category of oligopoly. And these 89 concerns, it should be noted, appear in only 23 or 24 of the 275 industry categories contained in the Census of Manufactures. All that this tells us, then, is

that giant corporations are present in 23 or 24 industries and absent in more than 250. It tells us nothing about the structure of particular markets for particular products in any of these industries, how many sellers are present, or what share of the market is enjoyed by each. It provides us with no information concerning those markets that may be occupied by a few firms of more moderate size. In short, it gives us no index of oligopoly.

So, too, with the studies of concentration of employment and output, by industry, in manufacturing. According to the Twentieth Century Fund, 6 firms had more than half of the workers in each of 46 industries and more than two-thirds in each of 31, in 1933, while 3 firms had more than half in 24 industries and more than two-thirds in 11. And according to the National Resources Committee, 8 firms hired more than half of the workers in each of 131 industries and produced more than half, by value, of the output in each of 136, in 1935, while 4 hired more than half of the workers in 75 industries and produced more than half of the output in 87. These figures, however, are based upon the classification of industries contained in the Census of Manufactures and, as a consequence, they tell us little about the structure of markets for particular products. An industry, as defined by the Census, may manufacture many different products, no one of which is made by all of its concerns. Figures based on this classification may thus understate the degree of concentration that exists in the production of particular goods. This is true, for instance, in the case of such categories as glass, furniture, drugs and medicines, sporting and athletic goods, stoves and ranges and warm air furnaces, electrical machinery and apparatus and supplies, cash registers and other business machines, and chemicals not elsewhere classified. Some categories, on the other hand, are so narrow that concentration of output, by product, is overstated. Beet sugar and cane sugar are listed separately, as are combs and hairpins other than metal and rubber, oleomargarine not made in meat packing establishments, and paper bags not made in paper mills. Indices of concentration within such categories cannot be taken as evidence of oligopoly in the markets where goods are sold.

When attention is directed to concentration of output on a product basis, a clearer picture of the structure of actual markets may be obtained. Only one study of this sort has been made. After analyzing the data for 1,807 products—about half of those reported for the Census of Manufactures in 1937—Thorpe and Crowder found that the four largest producers accounted for more than 85 per cent of the output in one-fourth of the cases, for more than 70 per cent in nearly half of the cases, and for more than 50 per cent in three-fourths. This looks like impressive evidence of oligopoly until one begins to examine the

product classification on which it is based. Some of the categories are still too broad. All pills, tablets, powders, and salts are lumped together, as are all tinctures, extracts, sirups, elixirs, and solutions, and all flags, vestments, robes, badges, and emblems. But many more of the categories are far too narrow. Goods are differentiated on the basis of the materials from which they are made, the processes employed in their fabrication, and the extent of integration obtaining in the establishments where production is carried on. Rubber combs are separated from other combs and furniture is treated as one product when made of wood, another when made of metal, and a third when made of fiber, rattan, reed, or willow. Work shoes and dress shoes for men and shoes for women, misses, and children are each divided into four, five, or six categories by the processes of manufacture. Women's hosiery knitted and finished in the same plant is a different product from that knitted in one plant and finished in another, and warm air furnaces manufactured and assembled in the same establishment are a different product from those assembled from purchased parts. There are many listings for closely competitive goods. Beet sugar is again listed in one category and cane sugar in another. Beer bottles are separated from beer cans. Lard is one product, vegetable cooking oils are a second, and other shortenings are a third. Men's suits are regarded as five different products, depending upon whether they are sold in three pieces, in three pieces with extra trousers, in two pieces, in two pieces with extra trousers, or in two pieces with extra knickers. Wrapping paper appears as sixteen different products, fine cotton dress goods as seventeen, and silk, rayon, and silk-mixture dress goods as twenty-seven. Certainly generalizations based on categories such as these cannot be said to measure the extent of oligopoly. The authors of this study are scarcely to be criticized for making use of the only classification of products that was at hand. But meaningful conclusions as to the structure of markets are not to be obtained until someone devises a product classification that groups goods according to the readiness with which one can be substituted for another. Furnaces, wherever assembled, keep off the cold, and combs, whether of rubber or plastic, contribute equally to the elegance of the coiffure.

These studies, at best, deal only with manufacturing industries, accounting for less than two-fifths of the income produced by unregulated private nonfinancial enterprise. They tell us nothing about the structure of markets in agriculture, fisheries, forestry, and mining, in the construction industries, in wholesale and retail distribution, and in the service trades. This sector of the economy, accounting for more than three-fifths of the income produced outside of government, finance, transportation, and public utilities, is too often dismissed by the theo-

rist as unimportant or completely ignored. It is his preoccupation with manufactures that enables him to indulge in sweeping generalizations concerning the omnipresence of oligopoly.

The ultimate consumer buys, of course, at retail, and retailing, by and large, is highly competitive. There were 1,300,000 retail establishments in the United States in 1943 and 1,800,000 in 1948. Clothing, drug, furniture, hardware, dry goods, and shoe stores each number in the tens of thousands; grocery stores and filling stations in the hundreds of thousands. Retail markets, to be sure, are local. But in almost every trading center there are several establishments in every line. Nor are boundaries rigidly observed: drug stores compete with variety stores, variety stores with candy stores, candy stores with tobacco stores, and tobacco stores with drug stores. Hard roads and automobiles have brought the local merchant into competition with the supermarket, the wayside stand, the specialty shop, and the department store. And even in the most isolated communities, he must compete with Sears Roebuck and Montgomery Ward. The consumer makes his contact with oligopoly, if at all, at second hand.

Thirty cents of the consumer's dollar goes for food. Most of his crackers come from two concerns, but he can choose among several brands of bread or buy flour produced by any one of 2,000 millers and bake his own. Half of his meat comes from four packers, but pork comes from more than 500, beef from more than 600, and sausage from more than 1,100, and all of them must compete with poultry and fish. Oleo is oligopolized, but happily it sells for less than butter. Fruits and vegetables come fresh or canned: peaches from 100 canners, beans, corn, and peas from 300, tomatoes from 800. Nationally advertised foodstuffs face the competition of private brands. And we have it on the authority of the Department of Justice that such things can be bought for less money at the A & P. Milk is produced on thousands of farms; its price is fixed, with official blessing, by local cartels. In this area, the consumer is affected less by oligopoly than by the price-boosting activities of governments.

Ten cents of the consumer's dollar goes for clothing. Men's shoes are made by nearly 200 firms, their shirts by 300, their suits by more than 600. Women's stockings are made by more than 200 concerns, their suits by 350, their dresses by 550, their shoes by 600, and their coats by 900. Nightwear, neckwear, underwear, furs, jewelry, millinery, gloves, handbags, umbrellas, and other articles of apparel are produced under similar conditions. In these industries, one may search in vain for evidence of oligopoly.

Another twenty cents of the consumer's dollar goes for housing. If he rents or buys, the market he enters is competitive. If he borrows to buy

or build, he may choose among scores of lenders. If he builds, he has a wide choice of architects and contractors. His plaster, cement, plumbing fixtures, and window glass may come from oligopolists, but such products as furnaces, builders' hardware, and ready-mixed paints are made by hundreds of firms and lumber is made by thousands. Building construction, in general, is more cartelized than oligopolized.

Five cents of the dollar goes for house furnishings. In wool rugs, carpets, linoleum, and electric light bulbs there is oligopoly, but in cookstoves, tables, chairs, sofas, bureaus, beds, mattresses, sheets, towels, dishes, pots and pans there is competition. It is another group of products, however, that seems to hold a peculiar fascination for the economist: sewing machines are made by 4 firms; radios, phonographs, refrigerators, washing machines, and vacuum cleaners are each made by 25 or 30. But the market in which the consumer buys them is nonetheless competitive. Here new goods must compete with secondhand goods and goods branded by manufacturers with those carrying the brands of mass distributors. An identical product may be bought from a manufacturer for \$175 or purchased, under a different name, from a mail-order house for \$125. The formula for competition is simple: add one part of Sears Roebuck to twenty parts of oligopoly.

Ten cents goes for household operation. Matches, soap, and thread come from oligopolists, but water, gas, electricity, and telephone service, which are more important, come from monopolists, and household fuels from thousands of competing mines and wells. Competition in the sale of branded cosmetics and toilet articles has been eliminated by law, but similar products are available at the nearest ten cent store.

The consumer spends a dime of his dollar on his automobile. And here he comes face to face with oligopoly. Or does he? If he buys a new car, he must confine his choice to twenty makes with comparable prices maintained for months at a time. But almost invariably he has an old car to offer in trade, and dealers normally compete in the allowances they make. New cars, moreover, must meet the competition of those sold at second hand. Tires are made by oligopolists, but 5 of them come on a new car and replacements can be obtained through mass distributors. Gasoline comes from 200 refineries; if it bears an unfamiliar name, it sells at a lower price. The market for accessories and repairs is predominately competitive.

Fifteen cents remains for recreation, education, insurance, medical care, and personal services. In cigarettes, sporting goods, cameras, and ophthalmic lenses there is oligopoly. In almost every other purchase there are numerous alternatives.

The list of consumers' goods produced by oligopolists is fairly long. But the part of the consumer's dollar that goes to pay for such goods is

very small. Food, clothing, housing, and furniture are more important than linoleum, electric light bulbs, cigarettes, matches, fountain pens, and tennis balls. And even in those cases where producers are few, the interests of consumers are usually protected by the buying power of mass distributors.

Oligopoly is more frequently encountered in the industries that make producers' goods. But even here it is not ubiquitous. Where such goods are fabricated from raw materials that come from farms and forests—grains, fibers, hides and skins, fats and oils, and lumber—the degree of concentration is comparatively low. Where they must be made to order—dies, castings, forgings, and stampings—firms are relatively numerous and small in size. And where materials must be assembled from widely scattered sources, as is the case with scrap and other forms of waste, hundreds of dealers compete in making sales.

The fields in which oligopoly instead of being the exception is the general rule are minerals and metals, machinery and equipment, chemicals, rubber, glass, and certain paper products and building materials such as newsprint and cement. These industries, admittedly, are of basic importance. But the conditions under which they sell are by no means characteristic of all the markets in the United States.

Here, quite typically, a few salesmen representing oligopolists deal with a few purchasing agents representing oligopsonists. Iron ore is sold to the steel mills, steel mill products to the manufacturers of locomotives, railway cars, automobiles, and machinery, locomotives and railway cars to the railroads, machinery to factories, offices, and the public utilities, chemicals to industrial users, tire fabrics to the rubber companies, tires and plate glass to the automobile companies, newsprint to the urban dailies, and milk bottles to the big distributors. The market for agricultural machinery is an exception to the general rule.

What, then, is the relative significance of oligopoly in the American economy? If this question were to be answered with any approach toward precision, it would be necessary, first, to work out a classification of products that bears some relation to market realities, and, second, to determine the spatial limits of the market areas within which these products compete for sale. And this is something that nobody has as yet attempted to do.

Such an analysis might well reveal that our economy is becoming more rather than less competitive. The boundaries of products are constantly being pushed outward as industrial research provides us with an increasing variety of ready substitutes. And the boundaries of markets have been steadily extended by the growth of transportation and communication. But the consequences of these developments, in terms of market structures, are not as yet susceptible of measurement.

Professor Stigler, drawing upon the material contained in my monograph on *Competition and Monopoly in American Industry*, has attempted to estimate the relative shares of income produced, in 1939, by industries that were cartelized, by those that were monopolized, and by those that were competitive. Among those industries that he was able to classify, he concluded that 3 per cent of the income was produced by members of cartels, 30 per cent by monopolists, and 66 per cent by firms engaged in active competition. When transportation and public utilities, accounting for 10 per cent of income produced, are subtracted from his category of monopoly, there remains just 20 per cent of income as the upper limit of unregulated oligopoly. This figure, it must be admitted, is highly dubious. But it is possible, at least, to hazard a guess that it comes somewhat closer to the truth than do the generalizations offered by Professors Galbraith and Bain. It may safely be concluded that oligopoly is not, by all evidence, the ruling market form in the modern economy and that it does not, in fact, comprehend the great majority of actual cases.

THE INFLUENCE OF SIZE OF FIRMS ON THE FUNCTIONING OF THE ECONOMY

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The title of this paper, if taken at its face value, would promise far more than can be delivered; but I have accepted it as assigned, assuming that those who over the years have followed the indecisive wrestling with the issues of business size and economic power are not likely to be deceived into exaggerated expectations at this time.

The literature of economic concentration has waxed progressively cautious about treating the size of firm as an independent variable. Contributing to this caution is the evidence from empirical studies of specific markets. Absolute size has proved less meaningful than relative size for determining the influence of a single firm or group upon market structure and behavior. Size leadership may be attained through growth in a single product line or it may develop from the cumulation of fractional positions across a broad segment of industry. A few large firms may appear to have the competition stabilized within a given industry and yet be effectively challenged with substitutes arising in industries hardly comparable either as to structure or character of operations. Thus the automobile industry, where the little assemblers are in the 200 million dollar class, is cited as an example of intensive competition, while the building materials trade, whose reputed giants are in the 100 million dollar class or below, and are relatively numerous, has long been served up as the classic example of an industry with monopolistic tendencies.

These and similar commonly recognized limitations greatly reduce the areas of generalization in which size of firm considered as an independent variable yields clear-cut principles for the guidance of public policy. Nevertheless, the factor of firm size is inextricable from the live issue of big business and the pervasive fear of its power to interfere with the functioning of a competitive system. More definitive testing remains to be done of the assumptions which identify the expansion of the size of firm—especially when accompanied by product concentration—with a weakening of the competitive system.

Because of differences in the resource requirements from industry to industry, there is little to be gained in this context from attempting to take up size of firm on a bracket-by-bracket basis. Competitive roles will therefore be compared in terms of small, intermediate, and largest firms, with full awareness of the overlappings.

Size, Earning Power, and Survival

The practical support of any segment of private enterprise—the type and volume of capital, labor, and patronage that will be attracted to it—is related to its performance in earnings, efficiency, and survival.

The annual *Statistics of Income*, prepared by the Bureau of Internal Revenue from corporate tax returns, permit comparison of earnings and average profit rates of corporations by ten size classes, ranging in total assets from under 50 thousand to 100 million dollars and over. Studies of these data have consistently reinforced the familiar observation that the area of small business is the area of greatest uncertainty and disparity.

1. The highest average rate of return is scored by the firms in asset classifications under 100 thousand dollars when they have net incomes. Likewise, the highest deficit rate and the highest percentage of firms with deficits come in the lowest-size group. The percentage showing deficits, as well as the average rate for deficit firms, undergoes a progressive reduction with rising size class.

2. Over the business cycle the sharpest year-to-year fluctuations in the rate of return are incurred by the firms in the two lowest-size classes, that is, below 100 thousand dollars of assets, and the earnings curve from year to year tends to flatten out with increasing size.

3. The relation between size and profitability differs significantly from industry to industry. Thus in wholesale trade and some branches of manufacturing, including apparel and paper products, the optimum rates of return appear to be reached below the quarter million dollar level of assets. In electrical machinery and cigarette manufactures, the rate of return climbs consistently toward the top-sized category of 50 million dollars and over. Generally speaking, the intermediate classes, including the brackets from a quarter of a million dollars to 5 millions of assets, tend to hold their ground with the large firm as to rate of return and appear closer to the large than to the small firms in the stability of their earnings.

4. The dispersion in the rates of return in small-scale enterprise has its counterpart in a kaleidoscopic pattern of capital structures. In general, small size is associated with the lowest ratio of fixed assets to net worth and to sales. Incidentally, the smaller the size category, the more drastically is the profit showing of the firm affected by the amount of compensation that is drawn by its top executives who, in the case of the small firm, are the owners.

Operating efficiency, apart from its reflection in profits, is measurable by size of firm only in the relatively infrequent cases where the small and large firm are engaged in the same operation. But even the incom-

plete and unsatisfactory data available would indicate that the smallest firms differ more widely in their unit costs, among themselves, than they do as a class from those in the upper-sized classes. The lowest operating costs for an industry are frequently attained by an intermediate-sized firm rather than by the largest firm in the industry. But as size increases, the effectiveness of the "product mix," dealer organization, and the other factors that serve to determine the over-all stability of the profit mix may be more relevant than specific unit costs to a realistic efficiency scoring of the company as a going concern with a record of consistent profits. It is here that the advantages of scale may become decisive.

The uncertainty among firms in the smallest-size classes is accentuated in the business turnover. Among the nearly four million firms in business, exclusive of agriculture, at least four out of five have from zero to three employees. The number of new business entries each year is rarely below 10 per cent of the total population of firms in operation. The majority of the newcomers consist of enterprises with no hired employees, with capital generally limited to their personal savings. (Less than 2 per cent of the new ventures have as many as twenty employees.) On the basis of past experience, about three in every ten starters may be expected to drop out before the end of a year. Another 30 per cent will quit or undergo change of ownership by the end of the third year. After five years, perhaps one-sixth of the original entries will have attained a foothold and justified a reasonable expectation of survival of established businesses. It is out of such unregulated freedom of entry that the backlog of established small business is progressively rebuilt. Thus, the business population has maintained a fairly constant position, at least in peacetime years, at around twenty-six firms per thousand persons, and with an average age approximating twelve years for the enterprises in operation.

Size and Equity Investment

The influence of size of firm on the gravitation of investment may be inferred from the discussion to this point.

Inasmuch as the small business rests on the personal capacities and limitations of individual owners, its initial capital must come primarily from the personal savings of the enterpriser himself. With increasing size and increasing formality of organization, a wider circle of investor followship may be acquired, though here the contrast between the intermediate-sized firm and the big firm listed in the securities exchanges is notable. In either case the degree of personal independence of action retained by the proprietor-management will determine in part the willingness of outside investors to risk their funds in the enterprise.

The usual limitation of capital for new and small business to the personal savings of the owner will tend to concentrate the small enterprise into the retail and service lines, requiring minimum outlays to start and maximum freedom of adaptation. Except for special lines of retail distribution associated with chain store operations, the direct competition of a small business will ordinarily be confined to from one to a handful of other small businesses or an intermediate business, within a local market. Small retailers in general have little truck with small manufacturers. Their merchandise, whether for distribution or re-processing will, in the majority of cases, come down from a large-scale enterprise which may already have prepared the market for the product. Only if and when the firm reaches the intermediate size is it likely to fill the role of supplier to big business distributors or manufacturers.

If the area of intermediate-sized firms is conceived as covering an asset range from a quarter of a million dollars to 5 million, it includes, roughly, 2 per cent of the total number of firms. It provides total employment about half as large as the 40 per cent of business employment supplied by small firms, or the 40 per cent supplied by the big business sector of the economy. Among intermediate-sized firms, too, competitive policy is subject to an unlimited variety of situations. In general, the investment support attracted to this sector under prevailing conditions of investment financing also involves intimate knowledge of the character of the business and the personnel in charge, by those who risk their funds therein.

The firm of intermediate size may compete with small business or with big business. There are still important areas of manufacture, especially in apparel and other soft goods, where its wares are sold downstream to small enterprise. However, to judge from the supplier and customer lists of a number of top-sized corporations, a characteristic role of the established intermediate-sized firm in manufacturing is that of supplier to large enterprises, whether assemblers or large-scale distributors. Seeking specialization where it can develop cost or quality superiority to the large-scale, full-line enterprise, in terms of its costs, the intermediate-sized firm may continue as the indispensable supplier of the large firm or receiver of its partially processed materials; it may, and often has, become integrated into a full-fledged challenger of the top-sized firms in the industry.

Gravitation of equity funds into large-scale enterprise is in part a response to technological opportunity and the rising scale of mass production. In part it reflects the availability of regular channels of investment and exchange for large-scale enterprise with no equally favorable counterparts for the flotation of capital issues by smaller enterprises (as the SEC studies have so well demonstrated). The

consolidated financial statements of the largest companies are today public property, and to that extent a wide public may follow the major developments in the operation of these companies. Under these circumstances the impersonal and remote investor tends to concentrate the savings which he allots to equity investment into the ownership of securities of the large corporation.

In his role as stockholder the investor counts on the judgment of large corporate management for productive reallocation of undistributed earnings. This process, apart from other considerations, has made for long-term forward programming and speeded development of the large-scale corporate enterprise as a strategic institution whose decisions affect not only the market for its own products, but the distribution of productive effort and income over the economy as a whole.

The balance of this paper, because of time limitations, will be devoted to consideration of a few characteristic aspects of the programming which may point up the large corporation's role as a competitor.

Adaptations of Market Leadership

Administered pricing is not confined to the giant firm. Apart from specific cases of patent or location monopolies, trade associations have demonstrated their ability to legislate administered pricing under the fair trade laws on behalf of their small business memberships. But in the case of the ranking large firms in industry, the size and complexity of operations require that improvisation must yield to the formulation of cost-price objectives for major lines, consistent with expected shares of the given market and the expected impact of company decisions upon the total market situation. The processes of market adaptation implicit in the pricing policy of the large firm may be illustrated by comparing three market situations which have been more or less under public notice.

Case 1 involves the performance of a large chain in retail food distribution. It may be recalled that the complaint in the A & P suit took note of the company's practice, when it entered a territory, of inaugurating a scale of prices designed to attract and maintain a volume of business set as the target. The scale of prices was not expected to yield a profit to the company until the consumer response approached the desired goals. When that point was reached, increasing volume reduced costs to the point where the prices charged would yield what the company regarded as a reasonable profit.

Case 2 is supplied by the copper market. Copper recovered from scrap is always more or less in competition with newly mined copper. Some months ago an unusual amount of copper scrap had accumulated in the stocks of the custom smelting companies. Copper prices were

depressed to a figure at which small producers of mined copper were shut down. Under the leadership of the largest producer the three leading copper mining companies continued to maintain quotations several cents above the going market rate, although at those higher prices little or no copper would move except to their own fabricating subsidiaries. Through the policy of the three market leaders in primary copper, the stocks of the custom smelters and scrap dealers were cleared out. When the excess from scrap was pretty well out of the market, the leading company edged down slightly from its hold-the-line quotation price to a figure which was considered adequate to supply a margin over average cost.

Case 3 illustrates the more typical approach of the company of predominant size in the manufacture of automobiles, farm equipment, and other nationally marketed durable lines. The starting point is an estimate of the number of units that can be sold over the total market covering the period for which policy is to be made. The company determines the share of that total of sales which it can expect to achieve. That expectation is translated into standard costs for the percentage of capacity that that volume will entail. Adding the desired margin of profit supplies the preliminary price determination. The actual price is presumably a reasonable compromise with the pertinent adjustment factors which may include the current cyclical position and outlook, the stocks in the hands of dealers, the vigor of the secondhand market, and those other considerations which impel a company that is big enough to approach the market from a base of its own costs to keep a weather eye, nevertheless, on other competitors and on the climate of public opinion.

While the statement of these three cases can cover only a fraction of the possibilities, they may suggest the varieties of market adjustments that must be made by the large as well as the small firm. Thus, in the case of the food chain, aggressive competition enables it virtually to reorganize food distribution in a given area in the direction of mass distribution, on a lower cost base. Because the grocery business is one in which the entry and exit of firms is quite easy and the standards of efficiency in buying and selling are correspondingly low, economies of scale in procurement and distribution can effectively be put to work. The large company is able to reach for higher volume and to hold it without risking cutthroat price competition or the elimination of competitors other than those that may be on the submarginal fringe. Aggregate food demand may be relatively inelastic, but the cross-elasticity of demand is limited only by such factors as geographical convenience, service concessions, or the inertia of the consumer. The monopolistic advantage of the large firm in the competition rests, moreover, on over-

all financial strength enabling it to institute now a pricing program on which it may have to await response over a considerable period, until increased volume and lower costs permit the establishment of a profit position.

The copper case, at the other extreme, represents a single simple commodity of which the major portion is supplied by three large companies. Total demand is relatively inelastic, and the shares of each company are pretty well established. The high investment involved in the exploitation of long-lived sources of low-grade ore serves as a practical barrier against entry of newcomers. Nevertheless, the industry is sensitive to past experiences with severe price fluctuations due to sudden stimulations or relaxations of supply or use. Under the circumstances stabilization has become a highly prized objective for the industry as a whole. The role of the dominant firm in holding an umbrella over the industry is apparently one in which nearly all concerned, from raw material to finished product stage, cheerfully acquiesce. The competition waxes strongest with substitute metals at the fabricating end.

The automotive case is one of long-run pricing policy in a commodity of which the supply is visible and the demand is within practical limits statistically ascertainable. The relatively few sellers may be expected in general to take their cue from the firm with the strongest market position and lowest costs. All members of the industry are capable of appraising each other's operations, and changes in relative cost relationships are not likely to be drastic. A cost method for arriving at the initial price therefore supplies a fairly sound index of the price that is likely to be consistent with the combination of maximum sales and survival of the leading competitors. The spread of costs within the industry tends to be reduced by the fact that the highly integrated firm supplies its various divisions on the same basis of cost plus profit as would an outside supplier, thereby modifying cutthroat price pressures of the integrated over the nonintegrated firm. The more drastic forms of aggressive price competition, which have their eventual effect in determining the character and the price lines of the models, take place at the dealer level among the thousands of distributor representatives in the industry.

The almost instant knowledge among the members of an oligopoly of what the other members are doing and the relatively high ability to match each other's tactics undoubtedly lead to inhibitions that are not consistent with the concept of a totally free market. A similar situation exists inside of the small local market in which three or four small grocers or lumber dealers or druggists may operate. But its implications

are obviously much more powerful in the case of those firms that operate over a national market and often have to consider factors of total employment and purchasing power in the planning of their market activities. Coupled with this larger responsibility is the vulnerability to government action of the large corporation that would take aggressive advantage of its competitive opportunities.

The mutual respect for relative stability in the shares of the market enjoyed by each of the firms at the top of an industry frequently is accompanied by a tendency for the pricing policy of the low-cost leader to serve as an umbrella over the less favorably situated members of the industry. Rigid maintenance of such stability in the respective market shares may deprive the consumer of progressive gains that might ensue from efforts to keep up with the leader in a more aggressive price competition. Of significance to management and stockholders is the corollary tendency for profit making opportunities in established lines to become stabilized. The antidote to such lethargy is to be found among the more progressive industrial giants through the changes continually being made in the allocation of the company's resources.

Innovation in Large-scale Enterprise

The large firm is not alone in its search for higher margin items to sweeten up the rate of return obtained from established lines. The smallest drug store will supplement its pharmaceutical and nationally branded items with toys and fountain services. In the case of the large firms, we see the forcing of product differentiation to gain for a commodity the standing of a specialty. But as specialties are matched by competitors and the magic detergent becomes just another soap powder, the discovery and exploitation of new areas with profit building possibilities becomes central in the effort of the large firm to retain a dynamic vitality. When this search is backed by financial and technical resources of the giant corporation, markets may be challenged by revolutionary innovations or new or improved products.

The danger of oversimplifying the picture is evident. There is wide divergence in the application of innovation policy, depending upon the character of the management as well as the character of the industry. Thus cigarettes and chemicals may be regarded as representing opposite poles in the degree to which the leading firms achieve basic variations in the product mix. But the following general observation appears to be justified by a study now in progress (by Brookings Institution) of about thirty top-sized industrial firms.

The industrial corporation with assets running into the hundreds of millions of dollars tends to become a pool of technical and financial

resources available to a group of related products or operations. The specific product divisions may operate with a degree of autonomy comparable to that of a totally independent corporation; but as a member of the corporation the division enjoys immediate access to financial resources and comprehensive know-how that might be relatively difficult for the independent division to tap.

Extensive research facilities, to which top ranking scientists and experienced engineers are attracted, are becoming a common feature of the giant corporation. The flow from pure science to practical application is supported by administrative and financial power, which translates ideas into marketable improvements or new products. To be sure, practical limits are set by such factors as the potentialities for mass production and the mass market, or the applicability of the research developments to the basic line, or the know-how which the company already has. Such limitations, however, have not prevented giant corporations from reaching out into new areas which, although intended for improvement of the traditional product, may in fact go far afield from it. Thus, over the years, a company like Eastman Kodak finds itself with sales in acetates and industrial chemicals far exceeding those derived from its original camera line. In du Pont, explosives become relegated to a minor position in a product mix that includes new textile fibers, lacquers, and over a hundred other products unknown to the previous generation. The largest flour milling corporation becomes a center for the design and engineering of packages and package-making machinery, not to mention electrical appliances. With such shifts of emphasis the large enterprise not only reaches beyond the boundaries of its own traditional product mix but comes to exercise a profound influence upon the established lines of other corporate oligopolies. No industry lines are tight enough to prevent the continuous cross-trespassing of the boundaries.

Allocation of Capital

Whether through product development or the acquisition of new product lines and new facilities, the large corporation serves as an investment trust in behalf of its stockholders engaged in the important function of rationing capital. Whether this process makes for the best selection of objectives consistent with optimum use of the nation's resources is a subject of debate on which opinions are likely to be colored by one's political philosophy. The large corporation has at least two mentors of the decisions of its management. If the stockholders fail to assert themselves, the market itself passes judgment on the desirability of the product use to which the corporation's capital has been put.

Significance for Public Policy

The available time and space have permitted a reference to a very few of the apparent relationships between size of firm and the functioning of the economy. Even these may serve, however, to suggest that the size, geographical spread, financial depth, product range, and continuing research for improvement of the position of the industrial giant provide both the arena and the compulsion for competitive activity no less varied than those available to the smaller firm. The sheer multitude of the small enterprises carries with it the natural implication of atomized and undisciplined competition. Were there the time, however, it could be shown that for practical purposes a small business competes with very few others in the local market with which it is ordinarily concerned. Important segments of the small business sector collaborate in the formulation of legislation and trade practices frankly designed as protection against free competition; another large sector is definitely tied to large-scale enterprise which supplies the sheltering framework within which it operates. Despite some common characteristics in the form or organization, the uniqueness of the combination of operations and policy worked out by each giant corporation is perhaps more striking than its conformity to pattern.

In any event the issue of big business cannot be resolved with its presumed sublimation of price competition as the sole frame of reference. There must be an appraisal of its adaptability to the total system within which it exists. Big business has not operated or expanded in a vacuum, nor can it be thus decomposed. Our society has set for itself—apart from progressively rising living standards—such specific goals as minimum wages, maximum hours, unemployment compensation, pensions, and sustained levels of high employment. Our government requires close to one-fifth of the national income produced for public use. These represent a very high degree of faith in the continuity of dependable backlogs, of which the consistency of corporate earnings is perhaps the one upon which we count most confidently.

Proposed changes in the size and scope of the managerial unit are designed to make our economy more competitive. But that accomplishment will require more than a mere decomposition of the managerial units represented by the large corporation. If further distortion is to be avoided, changes in size of the business unit require corresponding changes in complementary features of our competitive structure. Legislation and institutions which now make for price inflexibility and restrict entry, whether on commodities or labor, will have to be revamped in the interest of greater freedom of competitive choice. Flexibility in competition and investment, minus the anchorages af-

forded by large-scale enterprise, must affect the promises of social security that now rest so heavily upon the assumption of the financial strength and stabilizing influence of the giant corporation. Perhaps more sobering than any of these is the task of convincing the consumer that limitation of opportunities for product development and cost reduction issuing from the accumulated resources of large-scale enterprise is a price worth paying in order to gain the social satisfactions of a less extreme size contrast between large and small firms.

As things now stand, the giant enterprise has to contemplate a point at which the law of diminishing returns will catch up with overexpansion and seriously reduce its over-all efficiency unless it sloughs off the less manageable parts of its integration.

Large enterprises must continually reckon with their vulnerability and with the external countermeasures that their size may generate. These countermeasures may come from government, organized labor, smaller business, and other areas of the social structure. To be sure, there are valid political issues concerned with preference for the reduction in size of the business unit, just as there have been valid political issues concerned with the redistribution of wealth through fiscal and other public policies. But these considerations, while of profound interest to the economist, nevertheless do not reveal visible limits to the size to which the large firm may attain and still contribute to the workability of an economic system that may remain both dynamic and competitive.

PRODUCT HETEROGENEITY AND PUBLIC POLICY

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It has been remarked by Mr. Triffin that "for the historian of economic thought, the most revolutionary feature of monopolistic competition theories will probably be the unprecedented pace at which they conquered their audience."¹ Interpreting this as he does, mainly in terms of the appearance in textbooks for the first time of chapters on oligopoly, product differentiation, and selling costs, he may be right. But I must again lament the widespread misunderstanding of the subject; so that what has "conquered" appears often to be something quite foreign to the theory, at least as I understand it. Nowhere is this more true than in that part of the whole subject which is taken up in this paper: the reorientation of our ideas as to public policy in view of the fact of product heterogeneity.

Public policy must be presumed to seek in some sense the general welfare, and hence in the economic sphere it implies a welfare economics. The supremacy of pure competition with its corollary of prices equal to marginal costs as the economic welfare ideal is well known. Mr. A. P. Lerner's "Rule" is a quick and familiar reference.² What is perhaps not so well appreciated is how explicitly monopolistic competition has been interpreted as merely indicating the nature of the departures from the ideal which need to be corrected. Thus, although it may have reoriented in some degree our ideas as to how the economic system actually works, its impact upon our conception of the model towards which we would move appears to me to have been virtually nil. I say "towards which" in recognition of the fact that "pure competition" is evidently a theoretical concept, and that the practical minded economist is often ready enough to point out that "no one has ever advocated that it be established." What we want to be sure, is some kind of "workable" competition. But ordinary (purely) competitive theory remains the chief source of our criteria as to what should be done if possible, and of the direction in which we should move so far as we can. A striking instance is the subtitle of this part of the program of these meetings: "Can the American economy be made more competitive?" The implication is evident that if it can be it should.

Now if pure competition is the ideal, the direction in which we should move is very clear. For it is easy enough to show that the actual economy is shot full of monopoly elements, and hence that any move

¹ *Monopolistic Competition and General Equilibrium Theory*, p. 17.

² *The Economics of Control*, p. 64 and *passim*.

to get rid of them or to diminish their importance is in the right direction. The main point I want to make is that the welfare ideal itself (as well as the description of reality) involves a blend of monopoly and competition and is therefore correctly described as one of monopolistic competition. If this is true, it is no longer self-evident which way we should move, for it is no longer self-evident on which side of the ideal lies the actuality for which a policy is sought. It is possible that the economy should be made "more competitive"; but it is also quite possible that it should be made "more monopolistic" instead. Or perhaps, if there are faults to be found with it, it should simply be changed, towards something else which again involves both monopoly and competition, with the frank admission that, since we cannot measure monopoly and competition quantitatively, there is no way of comparing the actual with the ideal on any yardstick involving these concepts.

Let us proceed at once to the proposition that monopoly is necessarily a part of the welfare norm. In abstract terms it seems to follow very directly from the recognition that human beings are individuals, diverse in their tastes and desires, and moreover widely dispersed spatially. Insofar as demand has any force as a guide to production, one would expect entrepreneurs to appeal to them in diverse ways, and thus to render the output of the economy correspondingly heterogeneous, using this term in its broadest sense to embrace not only the qualitative aspects of the product itself, but also the conditions surrounding its sale, including spatial location.³ And since what people want—an elaborate system of consumers' preferences—is the starting point in welfare economics, their wants for a heterogeneous product would seem to be as fundamental as anything could be. Heterogeneity as between producers is synonymous with the presence of monopoly; therefore monopoly is necessarily a part of the welfare ideal.

It must be emphasized that any and all monopoly is included within the general concept of heterogeneity or differentiation (although there is no implication of an identity between the actual and the ideal). A monopoly is simply a product under a single control and significantly different from others on the infinite chain of substitutes. This holds equally for a patent, a cement producer separated in space from others, a local gas utility, a toll bridge, or the A & P. And they are, of course, all without exception engaged in competition with others nearby on the chain of substitutes and with others generally in the system. "Industry" or "commodity" boundaries are a snare and a delusion—in the highest

³ Apart from the influence of demand, output will also be heterogeneous because of the diversity of nature on the side of production; as illustrated by human services, both directly and as reflected in the products they create; and by the fact that sellers are separated spatially.

degree arbitrarily drawn, and, wherever drawn, establishing at once wholly false implications both as to competition of substitutes within their limits, which supposedly stops at their borders, and as to the possibility of ruling on the presence or absence of oligopolistic forces by the simple device of counting the number of producers included. As for the *conventional* categories of industries, it seems increasingly evident to me that they have their origin, not primarily in substitution at all, but in similarity of raw materials or other inputs or of technical methods used. Glass, leather goods, drugs and medicines are obvious examples. Apart from the wide diversity of products embraced by almost any so-called "industry," spatial separation of producers within it is an added prime obstacle to substitution in most cases. But the main point is that, even if lines were arbitrarily to be drawn, they would have literally nothing to do with the extent and character of the heterogeneity, either within such an "industry" or beyond it, which would be defensible from the point of view of welfare or of public policy.

All this is in striking contrast with prevailing notions of the significance of product heterogeneity for public policy. The reason is, I believe, mainly a difference in the implications of monopolistic competition on the one hand and of imperfect competition on the other; and the fact that the prevailing notions on public policy have been derived largely from an interpretation which follows the latter. It is worth noting that the terms "product" and "market" are used consistently in *Monopolistic Competition*, not in their usual broad sense, but with reference only to the individual firm. There are no "commodities," such as shoes, sheets, or shaving brushes, but only groupings of individual products. The term "industry" was carefully avoided, and does not appear at all (except where its limitations are being pointed out). By contrast, *Imperfect Competition* followed the tradition of competitive theory, not only in identifying a "commodity" (albeit elastically defined) with an "industry," but in expressly assuming such a "commodity" to be homogeneous.⁴ Such a theory involves no break whatever with the competitive tradition. The very terminology of "imperfect competition" is heavy with implications that the objective is to move towards "perfection."

Even within the terminology of monopolistic competition, the same tendencies have appeared in the connotation which the term "differentiation" has taken on to many something of the superficial. (Hence the term "heterogeneous" in this paper.) It is often conceived as describing the reprehensible creation by businessmen of purely factitious differences between products which are by nature fundamentally uniform. In this vein, some have even gone so far as to attribute differentiation,

⁴ J. Robinson, *The Economics of Imperfect Competition*, p. 17.

and monopolistic competition generally, to "imperfect knowledge,"⁵ as though the individuality of particular products could be dismissed as an optical illusion based upon ignorance—a purely psychic phenomenon. There seems, on the contrary, to be as much reason for people to lack knowledge of the differences between products as for them to lack knowledge of their similarities; and there is a good *prima facie* case for believing that "perfect knowledge" (while causing major shifts in individual preferences) would leave a system in which there were more and stronger preferences than ever. Certainly the consumer research organizations, which are engaged in perfecting the knowledge of their subscribers as to the goods they contemplate purchasing, are as much concerned with differences as with similarities.

Another device for leveling off the heterogeneous output of the economy into a series of purely competitive "industries" is the distinction between "rational" and "irrational" preferences, with its heavy implication that a substantial part of actual preferences are of the latter category. The distinction is not without its complications; but the test is supposedly simple: "If a consumer were *forced* to have B's goods instead of A's goods, would he feel worse off after the change had taken place? If, in fact, he would consider himself to be worse off, the buyers' preference is rational; if not, it is irrational."⁶ The conclusion is, of course, that if irrational buyers' preference exists, "then the community clearly gains by the concentration of the industry's output on a smaller number of firms." It need only be commented that the argument, for whatever validity it may have, should not be limited in its application to an arbitrarily defined "industry," but should be applied generally. On the one hand, it may be said that if Palmolive were abolished, people might be no "worse off" after they had got used to using Lux and Lifebuoy instead. But on the other hand, it is equally true that if baseball were abolished and bull fights substituted, people might be equally well or better satisfied after they were adjusted to the change, in which case their preferences for baseball should be classified as irrational. Similarly, many people have stopped smoking and, after they got used to it, were no more unhappy than before. There is a case, of course, for improving knowledge in all these matters, but no reason to think that improved knowledge would leave us with fewer or weaker preferences. In some cases it seems clear that increased standardization of certain products by public authority is indicated, as when oligopolistic forces are supporting an unduly large number of producers,⁷ or when the gain in efficiency is judged by proper authori-

⁵F. H. Knight, *American Economic Review*, May, 1946, p. 104; and G. J. Stigler, *Theory of Price*, pp. 214-215, 329 note, and *passim*.

⁶Meade, *Economic Analysis and Policy*, p. 155. I believe the distinction was first made by R. F. Kahn in "Some Notes on Ideal Output," *Economic Journal*, March, 1935, pp. 25-26. It is criticised by J. K. Galbraith, *ibid.*, June, 1938, p. 336.

ties to be more important than the losses in consumers' surplus through abandoning certain products. But the labeling of most preferences within an arbitrarily defined "industry" as "irrational" seems to me to indicate mainly a preference for the purely competitive ideal, and an attempt, perhaps largely unconscious, to salvage it. The alternative is not necessarily to assume that all preferences are "rational," but only that they are on the same footing—in other words, to make no invidious distinctions between them on the basis of the relative proximity of substitutes.

It might be added that no invidious distinctions are indicated either on the basis of whether or not the demands for particular products are influenced by selling expenditures. Here again, stress on irrational preferences makes an easy transition to the labeling of those established by advertising as irrational, and to the conventional sweeping condemnation of advertising as a "competitive waste."⁸ Granted that the techniques of modern advertising are often a shocking affront to good taste, or objectionable on other grounds, it remains true, so far as I can see, that the question of whether advertising is wasteful or not, in the sense of being a misallocation of resources, simply cannot be answered by any criteria derived from market demand and cost curves—or from indifference curves either. Here is a major aspect of "welfare" which appears to lie quite outside the conventional analysis of the subject. The general condemnation of advertising as a waste surely has its primary explanation in the irrelevancy that it could not exist under the perfectly competitive ideal.

The fact that equilibrium for the firm when products are heterogeneous normally takes place under conditions of falling average costs of production has generally been regarded as a departure from ideal conditions, these latter being associated with the minimum point on the curve; and various corrective measures have been proposed. However, if heterogeneity is part of the welfare ideal, there is no *prima facie* case for doing anything at all. It is true that the same total resources (either within some arbitrarily defined "industry" or within the whole economy) may be made to yield more units of product by being concentrated on fewer firms. The issue might be put as efficiency versus diversity—more of either one means less of the other. But unless it can be shown that the loss of satisfaction from a more standardized product (again, either within an "industry" or for the economy as a whole) is less than the gain through producing more units, there is no "waste" at all, even though every firm is producing to the left of its minimum point.

How are the two to be compared—a larger, less heterogeneous output

⁸ *Monopolistic Competition*, pp. 100-109.

⁸ Meade, *op. cit.*, pp. 165-166; Meade and Hitch, pp. 176-177.

as against a smaller, more heterogeneous one? The price system, especially in view of its all-pervasive oligopolistic forces and the omnipresence of selling costs whose welfare status is uncertain, appears to afford no test. If we may allow the individual producer his optimum selling expenditure, included as a lump sum in his fixed costs, and conceive a system in which every producer determines the equilibrium of his firm with reference to a demand curve which measures demand for his product at different prices while all other prices, products, and selling costs do not change, we have in the elasticity of demand one index of the strength of buyers' preferences for each product.⁹ If adjustment of prices along demand curves of this type could be enforced, many firms whose profits (perhaps nominal) are protected by the absence of vigorous price competition¹⁰ would certainly be involved in losses and would be obliged to go out of business before a general equilibrium for the whole economy were realized. There would be less heterogeneity than we find at present, and it would seem that something like what I have described elsewhere as a "sort of ideal"¹¹ would be established.

Another approach to the same problem is to test old products individually for survival and new products for admission to the economy by a consideration of the surpluses of satisfaction over cost which are sacrificed in one place and generated in another by the transfer of resources involved. Much of what has been written in this connection¹² seems to me to be vitiated by entanglement with the standard theory of "exploitation" which has evolved out of "imperfect" competition and which I have elsewhere¹³ shown to be fallacious—a theory in which hired factors are held to be exploited by entrepreneurs. But the theoretical criterion involved can be adapted to an analysis from which this objectionable feature is absent. Of course the old bogey of interpersonal comparisons appears at once; also the familiar problem of subsidy to the expanded firms which, if they had no extra profits before, are now, at the lower prices necessary to sell the larger output, losing money. Unfortunately the matter is too complex to be developed in this short paper. Let us only observe that, for whatever it may be worth, the final welfare equilibrium which emerges from this analysis, as from the preceding one, would inevitably involve product heterogeneity; and

* The curves of Mrs. Robinson's *Imperfect Competition* cannot be used for this purpose because they are defined as including oligopolistic reactions. Cf. *Imperfect Competition*, p. 21.

⁹ Cf. *Monopolistic Competition*, pp. 100-109.

¹⁰ *Ibid.*, p. 94. With allowance made for the "diversity of conditions surrounding each producer" (pp. 110-113) the "ideal" would evidently involve diverse outputs and prices for the individual producers in the system.

¹¹ Cf. especially R. F. Kahn, *op. cit.* and J. E. Meade (also Meade and Hitch), *op. cit.*, Part II, Ch. VI.

¹² *Monopolistic Competition* (5th or 6th ed.), pp. 182-184, 215-218.

that it would be characterized neither by the equation of price and marginal cost nor by production at minimum average cost for the firms involved. Indeed, by this procedure, the adjustment required from any starting point might as easily be to increase the supposedly excess number of firms as to diminish it. As an indication of what is involved, one might under this principle even revive that good old newspaper, the *Boston Transcript*, under public subsidy, since many "proper Bostonians" were strangely attached to it and no doubt lost heavily in consumers' surplus when it finally folded up.

Let us leave this question of how many products there should be, or of diversity, to say a word about the other major type of adjustment which has been analyzed in relation to product heterogeneity and welfare—that of the distribution of resources among a given number of products or among a given number of industries.

It has been proposed that resources be transferred from purely competitive industries, where price equals marginal cost, to "imperfectly competitive industries," where price is greater than marginal cost, and similarly from less imperfectly competitive to more imperfectly competitive industries, until the ratio of price to marginal cost is the same everywhere. Such a proposal may be dismissed at once on two grounds, either one of which alone is sufficient: (1) the boundaries of an "industry" being arbitrary, it is quite meaningless and (2) the demand and cost curves of different firms within any "industry" are highly diverse as to elasticity and shape. For these two reasons we must abandon altogether the idea of transferring resources in some vague way to an "industry," and face the question of the firms to which they are to be attached.¹⁴

What, then, of equalizing the price-marginal cost ratio as between firms in the economy? Apart from other difficulties, I believe there is a fatal objection to such a conception; viz., the generally prevalent oligopolistic relationships between firms. The logic by which this proposition is usually developed envisages each firm as an isolated monopoly (now very generally and lamentably defined as a "pure" monopoly),¹⁵ isolated in the sense that its output and price may be adjusted without appreciable effect on any other single firm. But where oligopolistic influences are present, there are two points to be made. First, the demand curve for any one firm which would indicate the effect on its price of adding resources to it cannot be known without knowing which of the many possible patterns of behavior under oligopoly will govern the case

¹⁴ Mr. Kahn's analysis explicitly assumes industries in which competition is "uniformly imperfect" (*op. cit.*, p. 21 note), and thus lays down principles for a wholly imaginary problem.

¹⁵ Cf. *Monopolistic Competition*, pp. 63-64, for the original meaning of this term, and I think the only valid use of the word "pure" in this connection.

at hand. In fact, since adding resources to any one firm would, by lowering its price, inevitably shift the demand curves of others economically near it (since every curve is drawn on the assumption of given prices for other firms), there seems to be no escape from abandoning the conception of transfers between firms considered to be independent, and reconceiving it in terms of groups of some kind. Second, the effect on welfare of adding resources to one firm, where oligopolistic interdependence is involved, is a function of whether or not, and in what quantity, resources are being added at the same time to others economically near. Even assuming that the price behavior could be directed according to some socially enforced rule, the major problem would still remain of finding the rule in welfare terms. I very much fear that, because of oligopolistic interrelationships between the welfare contributions of firms, we are reduced to asserting merely that resources should be transferred from one place to another in the system whenever the net effect will be to increase welfare. This is not very illuminating.

In conclusion, the consequences of product heterogeneity for welfare economics have been either ignored or seriously misunderstood. Monopoly elements are built into the economic system and the ideal necessarily involves them. Thus wherever there is a demand for diversity of product, pure competition turns out to be not the ideal but a departure from it. Marginal cost pricing no longer holds as a principle of welfare economics (not even for toll bridges); nor is the minimum point on the cost curve for the firm to be associated with the ideal. Selling costs may no longer be excluded from the problem or dismissed as an obvious waste; yet the impossibility of discovering from the standard welfare techniques what is the socially ideal expenditure on selling suggests that the techniques are unduly narrow. It has been impossible to discuss in this paper whole families of new problems which put in their appearance with a recognition of the fact that products themselves are variables and that there must be norms for them as well as for prices, costs, and outputs. What has been called the "new welfare economics," instead of being on a "secure basis" as suggested by Professor Hicks,¹⁶ has quite misconceived a whole set of major problems. It is badly in need of a general overhauling.

¹⁶ "The Foundations of Welfare Economics," *Economic Journal*, December, 1939, p. 711.

THE ORIENTATION OF ANTITRUST POLICY

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I. Introduction

The attack on oligopoly proceeds on two fronts: the control of trade practices (highlighted by the recent victory over basing-point pricing) and the proposal to move against size per se, when it gets to the point of a "big three" or a "big four" dominating an industry. Between them, they represent a large enough change to make pertinent some reconsideration of the basic objectives of antitrust policy in the light of current perspectives on oligopoly, price flexibility, and other matters; and especially in the light of macroeconomics and the rise of high and stable employment to a position of high priority as a criterion of policy, suggesting some possible readjustment among the older criteria. Questions are also raised as to legal instrumentalities. All this makes up too large an order to cover in twenty minutes, especially if one knew the answers. Being free from that handicap, I will try to indicate some pertinent questions.

II. Objectives of Antitrust Policy

What kind and degree of competition do the American people want and in what areas of the economy? What is it fair and reasonable to expect of competition? What do we fear from oligopoly, as distinct from outright monopoly? What can we hope to gain from preserving or re-establishing such forms of competition as are compatible with modern conditions of mass production and applied science?

Judging by existing laws and policies, the American people do not want unrestricted competition in the sale of labor, in agriculture, and in local trade. The area in which they definitely want more competition than they have is mainly limited to the profits, not the wage disbursements, of large-scale industry; that is, to a relatively small, though strategically important, fraction of the total national income. There are signs of uneasy apprehension that we may have gone too far in sanctioning monopoly or restriction of competition in these other areas; but as to what we want, in terms of the difficult problems of kind and degree, serious thinking has not got very far. I will follow usage, and speak mainly of competition in business.

Perhaps the simplest objective is low prices; or, rather, low prices relative to costs. At one extreme is the idea that proper competition should drive prices down to short-run marginal cost, which in any industry with fluctuating demand would mean operating deficits most of the time and a "sick industry." Most industries escape this condition;

but, as Professor Ben W. Lewis has maintained, the result lies too much in their discretion.¹ The objection is well taken, but he states it in extreme form, regarding nothing as satisfactory unless business is compelled to set correct prices and outputs, either by competition or by state authority. Presumably, he would not carry this to the logical limit in practice; if one did, the standard would require that no one except public officials should have any discretion—that is, any freedom of choice—in matters of price and output. This appears to carry the doctrine of the overruling power of competition to self-defeating and suicidal lengths. It also neglects the limited margin of discretion which even vigorous competition affords to the more efficient producers.

But it is not safe to assume that everybody always wants low prices. They take on a sinister color when the big concern's prices get low enough to hurt the small competitor. In the A & P case, the reasons for regarding the competition as unfair seem to be partly valid and partly doubtful; but there is room for the impression that the force back of complaints had something to do with the fact that the company was large and absentee and the competitors were small and local; also that competitors would not have objected so much to the company's getting bargaining advantages in purchasing if it had not passed the gain on to the consumer. If and when the preservation of the small competitor enters in as an end in itself, reduced prices take second place.

From another angle, it would be salutary if prices of manufactured goods, over a long trend, did not rise so much more than agricultural prices as to create a serious disproportion. Business competition might be of some help here; but not necessarily the most active kind under which prices move freely in response to changes in demand. That kind of competition drives prices up sharply when demand is strong. This might not be a great objection if it were a two-way street, but it does not seem to be, because organized labor (whose monopoly power seems immune to attack) has a way of entrenching its share of the high money incomes in the form of a nonshrinkable wage increase. The upshot is that while industrial competition might have some effect on the distribution between wages and profits, it does not look too hopeful as a means of rectifying the differential advantage of industry and trade over agriculture.

This brings us naturally to another objective: price flexibility. The most extreme idea is that unlimited cyclical flexibility of prices would go far to stabilize production and employment. This idea has been losing ground heavily of late years, with writers as far apart as E. S. Mason and Oscar Lange; and even Gardiner C. Means, whose studies did much to promote the idea, does not hold that price flexibility is

¹ *American Economic Review*, May, 1948, pp. 211-214.

sufficient. As to the familiar difficulty created by uncertainty, when a price is reduced, whether it is going lower yet, H. G. Moulton, in his latest book, seems to see more hope in the kind of flexibility that is not compelled by overpowering competitive forces, but is limited and voluntary; after which a co-operative effort by government, industry, labor, and agriculture might succeed in spreading confidence that a tenable bottom had been reached.² Something of the same sort may or may not be implied in the carefully guarded words of the President's Council of Economic Advisers in resting its main hopes for stabilization at high levels on a "delicate balance" of the elements in the price system. Another view might be that there is little hope in such price flexibility as business would voluntarily bring about; that the coercive effect of competition is needed, and that it takes governmental action, reducing fluctuations of total demand, to make the economy safe for competitive flexibility, assuring that it will not go to destructive lengths in a recession.

More important than prices as such is continued growth in the efficiency with which the factors of production are organized and energized: the efficiency of production, in real terms. Lacking this, low prices mean merely low real incomes for the producers, who are also consumers. With efficiency, high prices may be more than made up for by still higher money incomes, leaving real incomes larger. Probably the most important single reason for wanting vigorous competition is the service it can render, under favorable conditions, in stimulating productive efficiency.

From this standpoint—with all due diffidence about generalizing where conditions vary—it seems that the best results are likely to come not from a multitude of very little producers (likely to be both inefficient and unprogressive) nor from two or three supreme giants. The giants might be progressive or might suppress patents or let improvements hang fire for the same kind of reason that price reductions may hang fire under oligopoly: the certainty that the rival will promptly follow suit, both will be out much money, and neither will gain a decisive competitive advantage over the other. But it seems plausible that a competitive stimulus to efficiency does not require as large a number of competitors as are supposed to be required for dependably effective competition in price. The best combination may be a moderate number of large and strong concerns, preferably still trying to expand, and a fringe of smaller ones, some doing specialty types of work, and the most efficient of which have a chance to grow to match their bigger rivals.

But competitive progress in efficiency can be ruthless, especially in creating "technological unemployment"; and this kind of ruthlessness

² H. G. Moulton, *Controlling Factors in Economic Development*, pp. 329, 334-336.

is a natural accompaniment of the rigorously compulsory brand of competitive pressure. It is good personnel practice to safeguard the jobs of existing employees, even at some expense. From that standpoint, it is presumably fortunate that the concerns in which this issue arises most markedly, being the more progressive and also presumably among the more efficient, are typically not on the ragged edge of bankruptcy but have a margin of safety above this level, enabling them to follow enlightened policies even if they are not immediately and demonstrably profitable. It may be that this limited margin of freedom from ruthless competitive compulsion is as important a part of a healthy competitive situation as is the more merciless pressure which competition exerts on the "marginal" concern.

One further consideration arises from the striving for high-level employment. If there are areas of monopolistic advantage, they may attract more workers than the industries can employ, or the normal quota of workers may be priced partially out of the market. In either case, the result would be pools of underemployment. And it might be that no possible volume of total demand, however adequate, could be sufficient to mop up all these pools. Before it could do that, it would become violently inflationary for the rest of the economy. From the standpoint of avoiding this danger, mobility is probably a more important aspect of competition than the mere question of prices and profits.

III. Limitation of Size

If size is to be limited, it seems that no rigid and mechanical rule could be workable. The important thing, of course, is the number competing in a given industry and market area; and we have learned that neither industry nor market area is easy to delimit. And there are some industries in which technical conditions leave room for no more than possibly three concerns large enough to be of standard efficiency. The potash industry, at the time of the consent decree of 1939, was presumably a case in point.

Supposing that size is limited in some reasonably predictable fashion, then the large and strong concern, as it nears the limit of permissible size, while it could still increase its profits by reducing costs, would lose its competitive incentive to pass the gains on to its customers as a means of enlarging its sales. The industry would be likely to tend toward precisely the situation that has been complained of in a number of antitrust cases: each major producer maintaining his percentage of the total business unchanged and making no effort to increase it. This would be avoided if the limitation of size applied to mergers only and the growth of the single concern, by acquiring more customers, were permitted without limit. This means taking whatever chances might be

involved that an undesirable degree of concentration might still arise by "natural growth."

In this case, if the expansion of a concern's volume of sales called for added productive capacity, would it be permitted to build a new plant unit but forbidden to buy up the plant of a bankrupt competitor? It seems that there would be questions that would have to be left to administrative discretion, and the discretion would have to be very broad indeed. Perhaps the effect on incentives to growth would be worked out in a setting in which no major producer would know when he was getting too big until legal action was taken against him.

To interject a slightly frivolous note, it is probably lucky that there is no prospect of industry being atomized into really small fragments such as are required for "pure" competition, because then they would become politically popular instead of unpopular and their efforts to shelter themselves from the more extreme rigors of competition would have public support instead of meeting public resistance. Then the anti-trust laws might really be emasculated and the principle of the fair-trade laws might spread to business in general.

As a basis for discussion, I suggest that the attack on size is best limited to growth by merger; and that expansion of sales volume is best handled from the other end: by protecting small competitors against bargaining advantages of size that are unrelated to efficiency and by furnishing aids that may help smaller concerns to improve their efficiency.

IV. Controlling Trade Practices

Here the main point is that we have entered upon administrative regulation of trade practices for the future under procedures not too well adapted to the realities of such regulation, being suited to affording remedies for past violations of known and knowable law. A cease-and-desist order makes law for the future, regulating trade practices in what is at least nominally the negative fashion characteristic of a private enterprise system—telling people what not to do and leaving them free to do anything not forbidden. The alternative is to tell people positively what they must do; and in the case of trade practices, this would be assuming a very heavy responsibility. It is easy to understand that the Trade Commission should not want to assume it and that regulated industry and trade should not want them to do so. But there are some areas—especially perhaps under the Robinson-Patman Act—in which a negative order may come close to excluding all but one course of action. It may go farther, in view of the uncertainties of the case-made law, creating a situation in which no definable course of action is free from legal danger, under one or another of the various doctrines. In the basing-point matter, the outlawing of systematic

freight absorption points strongly toward uniform f.o.b. mill pricing; but this is not explicitly required; in fact, it may prove legally safer to absorb a little freight, unsystematically—whatever this might mean in practice. The industries are invited to experiment, at their own legal risk.

Or if the commodity is one for which a single price, disregarding distance, is appropriate, then if one large producer makes one price and holds to it without discrimination, his rivals are sure to "match" that price, and they will all be in legal trouble. If one discriminates, he is violating the Robinson-Patman Act, unless the Commission is persuaded that his discrimination does not impair competition. If he does it to meet a competitor's price, that seems no longer to be a safe defense; it might be allowed or it might not. The indicated conclusion is that the Commission will uphold your practices if it thinks you are a good economic citizen. It can hold that you are impairing competition or that you are not; and it does not have to formulate or defend any real theory of what constitutes impairment of competition; that is, a theory that is explicit as to what concept of unimpaired competition furnishes the logically necessary standard of comparison.

I have elsewhere argued that, in the interest of "due process" for dealing with this extremely difficult type of regulation, procedure should be adopted based on recognition that the Commission's theory of competition is the law in these cases and that this theory should be spelled out. That is, where impairment of competition is an issue, there should be a showing of how competition is impaired, by comparison with an identifiable concept of what would constitute unimpaired competition in an industry having the unavoidable physical and economic characteristics of the one whose practices are being adjudicated. Accepting the necessity of flexibility and Commission discretion and some resulting uncertainty, it seems that the evils of this situation are aggravated by present procedure, and could be mitigated by introducing, as an integral and arguable part of the case, a comparison of the economic results of existing practice and those which competition could be expected to produce in the industry in question—also, if at all possible, the probable results of the order the Commission proposes to issue. Such a comparative study is the heart of the economics of the case, and should logically be the heart of the law.

V. Some Doubts About Legal Instruments

The writer does not like arbitrary power or overwhelming bigness, whether in private business, labor organizations, or government. He recognizes that due process must adjust itself to the materials it has to deal with; but he is somewhat concerned lest, in the struggle with

great economic powers, weapons may be used which impair the substance of due process, out of proportion to the gains likely to be secured. The status of the Federal Trade Commission as both prosecutor and judge, whose verdict is final if supported by evidence, has its drawbacks, which are accentuated by some of the recent legal doctrines. It is one thing if evidence as to whether John Doe did or did not shoot Richard Roe is presented by partisan attorneys; it is another thing if complex and far-reaching questions of the effects of economic practices are treated in the same way, each side trying to score legalistic points to win a case and neither side producing an objective theory of public interest on which an impartial court might reasonably decide it. These cases seem to accent the need of economic counsel, acting as friend of court.

Other legal tools include putting the burden of proof on the accused party to prove his innocence. In cases involving discrimination to meet a competitor's price, under the Robinson-Patman Act, this carries the burden of proving "good faith" in the face of an adverse presumption. One wonders if there is any possible way in which such a burden of proof can be successfully met. Another doctrine is that of constructive collusion, inferred from the mere fact of consciously following a similar practice. This makes the legality of A's behavior depend on what B does. In effect, it seems to outlaw voluntary price leadership or followership, which had formerly been legal. One can understand the desire for a legal tool that could reach this practice. But does not this make any orderly set of market practices collusive, so that its legality depends solely on whether or not the Commission thinks it lessens or injures competition? If it should appear that it has the incidental effect of making competition a little less severe than the most rigorous and destructive degree possible, it would be legally vulnerable; and most orderly marketing practices probably have this effect in some degree or other. Too much seems to depend on whether the Commission chooses, from the various concepts named in the decisions, to make legality hinge on a substantial lessening, an actual but incipient injury, a "reasonable probability" that substantial injury will result, or merely a judgment that it "may" result.³

In general, the writer accepts the idea that legality should depend on the economic effects of practices, and that this should be judged by a specialized commission. He hopes that, without emasculating the law, procedures can be made somewhat more appropriate to this situation than some of them seem to be at present.

³ See *F.T.C. v. Morton Salt Co.*, 334 U.S. 37, 46, 47. Cf. *International Salt Co. v. U.S.*, 332 U.S., 392, 396; also *Corn Products Refining Co. v. F.T.C.*, 324 U.S., 726. (These cases involve injury to competition among customers.)

DISCUSSION

CLAIR WILCOX: Certain generalizations that are relevant to public policy toward big business emerge from the papers that have just been read. The maintenance of competition has as much to fear from legalized collusion among small firms as from overt or tacit collusion among large ones. Competition may be highly effective in serving the public interest when carried on among firms of appreciable size. There are advantages in the innovations that are introduced when firms are large enough to finance research. There are advantages, too, in the stability that is afforded by a measure of financial strength. There are restraints upon size, moreover, in diminishing returns, in the demands of labor, in potential competition, and in the threat of public regulation.

It does not follow from this that the problem of size is safely to be ignored. But it must be admitted that we do not now possess the knowledge that would enable us to put a definite limit on size. We cannot measure, with any precision, an industry, a product, or a market. We cannot determine, with any certainty, the scale of operation that would make the greatest contribution to innovations in product and technology, to economic stability, and to expansion of consumption through the reduction of costs. And even if we could, the establishment of a limit on size might well be deadening in its effect. It is fairly clear that policy is on safer ground when it attempts to prevent the attainment of size through merger than when it seeks to check internal growth.

With all of this, I find myself in agreement. On certain other points, however, I should like to register a dissent.

Professor Clark believes that the Federal Trade Commission should confine itself to telling business what it cannot do and refrain from prescribing what it shall do. But he objects that the orders of the Commission and the decisions of the courts in the basing-point cases amount to a prescription of f.o.b. pricing or operate, at least, to place all delivered pricing in jeopardy. I do not so read them. Independent and sporadic freight absorption has not been questioned. Collusive basing-point pricing has been declared illegal. Between these two extremes, a variety of systematic and persistent delivered pricing practices may remain in doubt—in doubt because the Commission, instead of prescribing what industry shall do, has followed the rule of telling particular industries what they cannot do. Clarification of this situation, whatever the Congress is likely to do, must ultimately come from the courts. It may be noted, however, that much of the current pressure for amendment of the antitrust laws appears to find its origin in the fact not that the interpretation of the law is obscure but that it is all too clear.

Professor Clark has also said that the legality of business practices should depend upon their economic effects. But he objects to judicial decisions which construct collusion by inference from the effects of business practices. He would thus impose upon the agencies of enforcement an obligation not only to prove that the effects of a practice are economically undesirable but also to produce conclusive evidence that the practice is a consequence of overt

collusion. It must be recognized, however, that such a rule would raise an insuperable obstacle to the enforcement of antitrust in markets long habituated to noncompetitive patterns of behavior. It is for this reason, one suspects, that the defenders of basing-point pricing have sought to have a requirement of "reliable, probative, and substantial evidence" written into the law. If this were done, many monopolistic practices would, in effect, be granted immunity, however undesirable their consequences might be.

Professor Clark argues, finally, that antitrust should be guided by the development and application of objective standards of competitive behavior. But his own comments on some of the possible goals of policy are not encouraging. Prices equivalent to short-run marginal costs, prices that are low, and prices that are flexible are all found wanting. Nor is any other criterion of price behavior suggested in their place. Professor Chamberlin is even more discouraging. In his view, the fact that consumers take pleasure in a heterogeneity of products prevents the establishment of a clear goal for policy and weakens the case for public control.

Professor Chamberlin's position appears to be based upon an identification of monopoly with product heterogeneity that leads him to characterize most, if not all, producers as monopolists. And each of these monopolists, he says, is in competition with the producers of substitutes. The Atlantic and Pacific Tea Company is thus bracketed with the cement producer, the local gas utility, and the holder of an exclusive patent right. It is true, of course, that almost every product competes with possible substitutes. But the ease with which one shifts from Kolynos to Ipana is so much greater than that with which one shifts from electricity to the kerosene lamp, the washboard, and the broom that the difference in degree becomes, in fact, a difference in kind.

I am not persuaded that the heterogeneity of products and the possibility of substitution make it impossible for us to draw a line between those market situations that serve the public interest and those that do not. Whatever the theoretical difficulties, criteria for the guidance of policy must be and will be devised, if not by the economist, then by the lawyer and the engineer. If economics does not eventually contribute to this task, then so much the worse for economics.

E. H. CHAMBERLIN: Mr. Wilcox has misunderstood me in drawing the conclusion from my paper that I favor a do-nothing or do-little policy in the matter of regulation. I meant only to criticize existing criteria of policy and to call for a reconsideration of these criteria with particular reference to the problems arising out of product heterogeneity. The result of such reconsideration may well be either more or less regulation. With respect to the policy problems arising out of oligopoly, it seems likely that I should favor more regulation than he does, since the quantitative importance of the problem appears to me much greater than it does to him.

In the case of *Wilcox v. Galbraith and Bain, et al.*, I must cast my lot with the defendants. Indeed, it appears to me that Professor Wilcox has presented what might be called an "alleged refutation of the alleged ubiquity of oligopoly." I agree that the recent studies of industrial concentration and of

concentration on a product basis do not yield meaningful conclusions in the matter; but he seems to think that a classification can be set up which will be satisfactory to the purpose, and this appears to me to be out of the question. The reason is that the categories, like those used by Thorp and Crowder, will always be, as he conclusively shows for them, either too broad or too narrow. In other words, the whole picture is one of an intricate interlacing of substitutes which must rule out as a procedure the setting up of a product classification and the counting of producers within it.

Mr. Wilcox's whole method seems to boil down to calling attention to the competitive forces in the markets—especially retail—which he discusses. In the earlier part of his paper he has objected to categories which are too broad and concluded that generalizations based on such categories cannot be taken as evidence of oligopoly. What, then, of his own presentation of the fact that there are 1,800,000 retail establishments in the United States as evidence against oligopoly in retailing? He at once observes, of course, that retail markets are local, but offsets this concession with the observation that "in almost every trading center there are several establishments in every line." But "several" is what oligopoly means; and it would appear that there is no longer any issue as to retail trade, since Mr. Wilcox is in agreement with his opponents. Certainly even adding in the wayside stands and Sears Roebuck provides no basis for concluding that "the consumer makes his contact with oligopoly, if at all, at second hand."

The long account of the hundreds of producers in the manufacture of various kinds of consumer goods is equally vitiated by heterogeneity within the categories, especially with reference to spatial location. It is the 1,800,000 retailers all over again. To take only a single example, there may be, as he says, hundreds of firms producing ready-mixed paints; but the hardware store which supplies me (incidentally, one of two in the vicinity) carries only one brand; and although it is of only mediocre quality, the value of time and, if you like, inertia have so far prevented me from seeking out a better one. It is easy to show that there are substantial competitive forces at work in the economy, but I do not believe that Mr. Wilcox can by the methods employed make a tenable case against the importance of oligopoly.

I might comment that the correct approach appears to me to be not that of classifying commodities and counting producers but one of inquiring into the cross-elasticities of demand as between individual producers. Only where these are negligibly small is oligopoly absent.

There has been much discussion of size, especially in the papers of Mr. Kaplan and of Professor Clark; and I think the point should be made that the meaning of size in relation to competition becomes very different in a monopolistically competitive economy from what it is by purely competitive standards. It is again a question of the boundaries of "industries." When the economy is conceived as having a given number of more or less competitive industries, it follows by simple arithmetic that the larger the firms, the fewer there will be of them in the industries where they appear and the more likely it is that a problem of oligopoly power will arise. From this simplified view

comes the perennial demand for more and smaller units, the extreme of which is "atomization."

What is not realized is that any move towards "atomization" will normally involve an increase in product differentiation through abolishing the standardized output of the large unit. In other words, the problem is not merely one of numbers or of the size of units but also of heterogeneity. A perfect example is at hand in retailing, where the individual enterprise is typically both small and differentiated very substantially from others. It is illuminating that in recent years the strongly competitive element in this area has been introduced by the big units—the chain stores—and that one of them, the A & P, in part by reason of its very success as a competitor, has recently run afoul of the Department of Justice.

Speaking generally, if products are differentiated, a firm will often be large by virtue of the fact that it produces many "products," and hence competes in many markets. It may, of course, attain a position of substantial monopoly or oligopoly power in a number of these markets, but not necessarily. The recognition of product heterogeneity and the scrapping of the theoretical apparatus of perfect competition ought substantially to weaken the case against the large firm.

J. M. CLARK: I am afraid I must have given Mr. Wilcox some misleading impressions of my position. I am not asking for a requirement that overt collusion be proved and would like to de-emphasize the issue of collusion rather than do anything to increase its importance. Secret collusion can reasonably be inferred from overt conduct; but the present doctrine seems to have gone far beyond this—to the point of a legal fiction whereby any orderly trade practice is tainted merely because it is orderly. Where this is the only kind of collusion present, I should like to see such cases settled on other grounds. Collusion to do innocent things is no offense; and trade practices that impair competition should be subject to correction whether or not any actual collusion enters in.

I did not suppose I was calling for "objective standards" of competition, if I get the connotations of that term. I am accepting the case-by-case method, merely suggesting disclosure of the rationale that underlies the decision in a given case. If it rests on a ruling that a company is not behaving competitively or is impairing competition, that calls logically for a theory of what competitive behavior or unimpaired competition would be in this industry. Otherwise, reasoning is in the air, and standards derived from pure theory may be used, not to try to attain them, but merely to convict an industry of noncompetitive behavior for deviating from them, despite recognition of their practical unattainability. I am groping toward some tenable middle ground between this kind of thing and the formulation of positive specifications of proper competitive conduct.

Turning to Mr. Chamberlin's paper, I am very glad he has come out so definitely in an attempt to undo some of the damage done by the misapplications which have been made of his theories; and which I am afraid were

bound to be made, in the nature of the case. On a purely terminological basis, I am afraid, also, that it is a little late to try to incorporate the concept of monopoly as a constituent element into the "welfare ideal" toward which antitrust policy is directed.

As to heterogeneity of products, I would not class this as "synonymous with the presence of monopoly" where rival producers are free to imitate one another's products as closely as they wish or are able. I would contend that "competition in quality" means something and is inseparable from heterogeneity of products. It differs from price competition between producers of a homogeneous product, which tends to wipe out quickly any price differentials available to the same buyers at the same time and place, whereas differences of quality can and do persist. I would contend that they are not merely part of the "welfare ideal," construed so as to cover elements of monopoly; they are in themselves an element of competition. Newspapers are an excellent example. Aside from the nostalgia of a minority group for the *Boston Transcript*, which of two situations represents the more important form of competition: two different papers in a town, selling at the same price, or two papers identical, down to editorials and comics, but competing in price—whatever that might mean under those circumstances?

I should like to underline Chamberlin's point that the question whether advertising is wasteful cannot be answered by any criteria derived from the market. Traditionally, the basic theoretical concept of production is the creation of means of gratification of a demand which is taken as a given datum. Advertising, being concerned with arousing or directing demand, simply does not fit this category, and criteria for judging it are different—educational criteria, if you like.

Chamberlin presents the right kind of heterogeneity as improving the buyer's range of selection enough to be worth an added cost due to firms restricting their scale of production short of the "minimum point on the cost curve," in accordance with his well-known tangency theorem. An added cost of this sort might occur, but I question the thesis that it is made inevitable by the slopes of the demand and cost curves. Both are properly of the long-run variety. The long-run cost curve is unlikely to show any definite minimum point. And the long-run demand function is of the sort in which a given differential price policy takes effect, not simply in a given volume of sales, but in a progressive growth or decline of volume, over time. To represent this by any two-dimensional demand-curve is misleading; and I am sure does not faithfully represent the reactions of businessmen to these situations. They normally seek expansion and regard a persistent decline in sales volume as a sign of ill-health. I am sure it is not typical behavior for them to follow a policy which they definitely expect will restrict their output to a point that would predictably and appreciably raise their unit costs. The cost of salesmanship is real and substantial—and incidentally is not confined to heterogeneous products. It appears dubious whether the tangency theorem adds more to it than an analysis of something that might happen but need not. All this reinforces the general proposition that competition in quality need not be classified as an element of monopoly.

CAPITALISM AND ECONOMIC PROGRESS

INTRODUCTORY REMARKS BY CHAIRMAN

LOUIS M. HACKER: During capitalism's relatively brief history there have been a number of periods when attempts at revaluation have been made. One hundred years ago—following depression in Britain and amidst the alarms and excursions of Chartism at home and revolution abroad—Disraeli, Mill, and Carlyle looked at the new industrialism then emerging and found it seriously wanting. The values they employed were not economic but moral and social; the "condition of England" was so deplorable that new attitudes and public policies were urgently required to transform it. All this at the dawn of a new era: when innovation was to move into the railroading, shipbuilding and machine-tool industries; when the savings of Britain were to flow so impressively across the channel and overseas to accelerate the industrial revolutions of Western Europe, the United States, and the dominions; when life expectation, real wages, popular education—all signs of improving welfare—were to begin their upward climbs.

Fifty years ago in the United States, following another depression and in the midst of an extraordinary increase in urban population with its accompanying dislocations, a similar critical examination began to take place. "The condition of America" alarmed Thorstein Veblen, Simon Patten, Jane Addams, and a host of other moralists and reformers; socialists and progressives (soon to be joined by political leaders) clamored for new moral values and the assumption of a public policy based on greater social responsibility.

We seem to be living in another such period of re-examination today. There may be generally accepted measures of economic progress; we may be better off than we were 150 or 100 or 50 years ago; but, clearly, noneconomic values are once more asserting themselves. Are we happier, freer, more secure? Public policy flows from our efforts to answer these questions rather than our estimation of our successes in economic terms.

This is curious, for in the United States, notably, it is possible to talk of capitalism and its achievements or shortcomings. American economic institutions developed wholly in a capitalist climate. There never existed any vestigial traces of feudalism or mercantilism to complicate and confuse growth and attitudes. Here is a pure case of capitalism and a perfect control group for comparative purposes. What have been American capitalism's economic accomplishments? If we can indicate this clearly—so that economic comparisons with pre-industrial capitalist and socialist societies will be possible—then, perhaps, public

policy in the future will be based less on emotional and more on rational considerations. These are some of the reasons why—to me, at any rate—the stocktaking of capitalism, which is the general theme of this year's conference, is important. The economic historian, here, can play a really effective role.

Our speakers are applying themselves to some of the problems involved in such a historical examination and the likely effects on policy.

AN APPRAISAL OF AMERICAN ECONOMIC PROGRESS

By HAROLD F. WILLIAMSON
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The title of this paper poses a difficult task. To make an appraisal, it is first necessary to have some standard by which an evaluation can be made; in this case a satisfactory definition of economic progress. Beyond the definition of a standard, an appraisal involves the application of yardsticks which can be used to measure achievement or lack of achievement in terms of the accepted standard.

Merely to state the problem indicates some of the complexities involved. Consider, for example, the term progress. Progress means movement toward some particular goal or objective. The difficulty comes in the selection of the goal. Goals are determined by philosophical and ethical considerations and in the final analysis are based upon group or individual preferences. There is no appeal beyond the point of the statement of such preferences. No one can prove by an appeal to logic the superiority of one preference over another.

This proposition may be self-evident but I believe it is worth noting. For one thing, a failure to understand the relative nature of individual and social goals accounts for a considerable amount of confusion which arises over the meaning and content of progress. It is a point that we may well keep in mind when and if we start implementing President Truman's Point Four Program of giving aid to backward areas. As the attitude of many Americans toward the present situation in Britain demonstrates, there can be sharp differences in the interpretation of progress and the means of obtaining it even between two countries that share a common cultural heritage. These differences are likely to be even greater in dealing with countries whose cultural background has been quite different from our own.

The adjective "economic" brings the problem of definition within a narrower framework but at the same time introduces a new complication. This is because the economy is seldom, if ever, considered an end in itself. An analysis of most statements concerning economic progress reveals that explicitly or implicitly their authors have some further goal or objective in mind, toward which the economy or economic institutions are assumed to contribute. This point is well illustrated by Professor Boulding who defines economic progress as "an improvement in the means used to obtain a given end" but goes on to say: "Economic progress helps in getting what we want . . . but if we want the wrong things then it will simply enable us to damn ourselves all the more

easily. The critique of ends—i.e., the study of what are the right things to want—is not within the province of economic analysis; indeed it lies within the domain of wisdom rather than knowledge, of religion rather than science.”¹ Accepting for the moment Professor Boulding’s rigid definition of economic progress, let us turn to a historical appraisal of the American economy as judged by its productive capacity.

There is no challenging the assertion that there has been a remarkable increase in the ability of our economy to turn out goods and services over the past 160 years. Even a slight acquaintance with the level of consumption at the end of the eighteenth century brings out the contrast with the variety and quantity of goods available to Americans at the middle of the twentieth century.

Fortunately it is possible to go considerably beyond this impressionistic picture into giving some quantitative measurement of economic growth, although it should be pointed out that there is no single, inclusive yardstick that can be used.² Economic growth is a complex process, and various methods, differing somewhat in their approach and usefulness, have been developed.

The first of these may be described as the inventory approach, or evaluating our resources at various dates. Interest in this type of measurement for the United States dates back at least to 1806. In that year Samuel Blodgett published his *Economica, A Statistical Manual for the United States of America*, in which he gave estimated values of real and personal property for a number of years. Similar studies were attempted in later years, and beginning in 1850 and continuing until 1922, the Bureau of the Census compiled estimates of our national wealth. These were supplemented by special studies by government agencies and in 1946 Simon Kuznets brought out his book on *National Product Since 1869*, a part of which is devoted to a measurement of national wealth. For a number of reasons these studies have a limited usefulness. Aside from the crudity of statistical methods utilized, the earlier series were quite limited in their coverage and are not comparable with later ones. Even the census estimates, covering real estate, capital equipment, and stocks of consumer goods, are so beset by limitations of accurate data that the Bureau’s figures showing an increase in national wealth from 43.6 billion dollars in 1880 to 320.8 billion in 1922 give at best only a rough approximation of the growth of these items of wealth. Moreover, with better data there would still be problems in estimating wealth. It is difficult, for example, to attach a monetary valuation to natural resources, not only because of differences

¹ Kenneth Boulding, *Economic Analysis* (rev. ed.), p. 647.

² See Simon Kuznets, “Measurement of Economic Growth,” *Journal of Economic History Supplement*, 1947, p. 26.

among experts regarding the extent of our oil reserves, the quality of our soil, and the like, but also because we have not as yet attempted to measure with any degree of accuracy those resources which have not come into use but remain potential assets. The evaluation of capital is limited by many of the same difficulties in determining qualitative differences in reproducible wealth items.

An inventory of our labor force gives more satisfactory results. Data are more readily available and less subject to problems of interpretation. Being more homogeneous than the diverse items of wealth, it is not necessary to apply a dollar value in order to get a common denominator. Thus to point out that our work force which according to the Census numbered some 2.8 million in 1820 had grown to 52.14 million in 1940, gives a useful measure of this important "resource" in our economy, provided, of course, that average productivity per worker has not radically changed. At the same time, this information does not shed any light on the qualitative aspects of our labor force, including technical knowledge, skills, and work habits, which are not susceptible to measurement.

These various limitations should not, however, obscure the usefulness of measuring stocks of resources, insofar as data can be obtained. Even though our interest may be centered primarily on income flow, the inventory approach may reveal certain characteristics of the productive organization more clearly than any alternative method.

A second approach to the problem of measuring the growth of an economy has been to examine its functioning in respect to selected activities. The basic assumption involved is that if the percentage of resources devoted to supplying basic needs decreases over time, it is an indication, with certain reservations, that the economy has "progressed" as a productive unit. This approach would not be applicable without further qualifications if the area under consideration had become more specialized and was dependent upon exchange for supplying its basic needs, as was true of Great Britain in the nineteenth century. This measure may be applied to the United States, however, because throughout our history we have been largely self-sufficient in respect to agricultural products, at the same time devoting an increasing proportion of our resources to other pursuits. While it is difficult to show the exact allocation of resources and capital to these various divisions, it is possible to indicate that in 1820 approximately 72 per cent of our labor force was engaged in agriculture, whereas in 1940 the percentage was slightly over 17. Data on a further breakdown of categories are quite unsatisfactory prior to 1870, but a comparison of the principal available categories of employment in 1870 with 1940 shows the following results:

TABLE 1

LABOR FORCE: INDUSTRIAL DISTRIBUTION OF GAINFUL WORKERS

(In millions of persons; percentages shown in parentheses)

	Agriculture	Forestry, Fishing, Mining	Manufacturing and Construction	Transportation, Public Utilities
1870	6.73 (50.5)	.25 (1.9)	2.83 (21.3)	.58 (4.5)
1940	9.00 (17.0)	1.25 (2.3)	15.45 (27.1)	4.14 (8.5)
	Trade, Finance, and Real Estate	Educational and Other Professional Services	Domestic Services	
1870	.85 (6.51)	.33 (2.5)	.94 (7.3)	
1940	8.73 (16.5)	4.00 (7.5)	2.61 (4.9)	
	Personal Services	Government	Not Allotted	Total
1870	.27 (2.1)	.10 (.8)	.40 (3.1)	12.92
1940	3.10 (5.8)	1.60 (3.0)	3.33 (6.5)	53.3

Source of basic data:

Historical Statistics of the United States, 1789-1945 (U. S. Bureau of the Census), p. 64.

Actually the increasing percentage of labor devoted to nonagricultural pursuits shown by these figures probably overstates the case somewhat, as many of these activities were carried on in the home or on the farm prior to their becoming specialized. Nevertheless, this type of measurement gives further light on the nature of our economic growth.

Over the past twenty-five years a growing interest in national income analysis has given a third general approach to the measurement of economic growth. In many respects this approach is the most satisfactory of all, and we may accept Robert F. Martin's statement that "national income estimates when constructed on a fairly comparable basis for a period of years provide a composite record of a country that affords a broader view and better understanding of its history than any other series of general statistics."³ Martin's own study of national income for the period 1799-1938, corrected for price changes, indicates a realized national income of 1.09 billion dollars in 1799, and 69.13 billion in 1938; per capita income at the earlier date was \$211 and in 1938 stood at \$531.⁴ On a roughly comparable basis, national income in 1945 was around 174 billion dollars and per capita income \$1,250.

The national income record is even more impressive when changes in the number of hours worked are taken into account. During the early nineteenth century the hours for agriculture and industry alike were customarily from "sunrise to sunset," or a work week of between 84 to 96 hours in the summer and 54 to 72 hours in the winter. There are no

³ Robert F. Martin, *National Income of the United States, 1799-1938*, p. 1.⁴ *Ibid.*, pp. 6-7.

statistics for agriculture, but as of 1945, average weekly hours in manufacturing were 43.4.⁵ Thus despite a substantial reduction in the average number of hours worked, national income per capita expanded some sixfold between 1799 and 1945.

National income analysis has also made it possible to measure the contribution of various activities within our economy to the total flow of goods and services. While Martin's categories are not directly comparable with the census divisions noted above, they show that agriculture, which contributed 39.5 per cent of total Realized Private Production Income in 1799, was adding 12.3 per cent in 1937. Manufacturing's percentage grew from 4.8 to 30.3 per cent, and Trade and Services from 14.8 to 28.3 per cent during the same period. Transport and communication dropped from 24.0 to 10.8 per cent.⁶

The attraction of measuring the growth of the economy in terms of its output of goods and services and the apparent precision of the results call for a word of caution. In addition to the more technical statistical problems involved in deriving any time series on the national income of the United States, Martin and others have pointed out there is a serious but indeterminate omission, especially during the earlier decades, of goods and services which because they were produced by relatively self-sufficient households were not susceptible to a market measurement. Beyond these considerations there is some danger of attaching too much significance to the data. It is generally agreed that as a basis for comparison, national income figures vary in their accuracy inversely with time and space. For one area over a short period, during which it may be assumed that the productive pattern remains unchanged, their accuracy may be high. For a period of 160 years, when a whole host of new products had to be brought into consideration in weighting an index number of prices, there is some question as to just what a per capita income of \$531 in 1938 (or \$1,250 in 1945) means in terms of production compared with \$210 in 1799.

The foregoing represent the most comprehensive and important yardsticks that have been used to measure the growth of the American economy. Their application not only confirms an expansion in the capacity of our economy but they make it possible to establish contours to a growth which would otherwise remain vague and impressionistic.

This conclusion, however, still leaves unanswered a question of appraisal as to just how remarkable or noteworthy the growth of the American economy has been—a question which would remain even if our measurements of the growth were completely accurate. One basis

⁵ U.S. Bureau of the Census, *op. cit.*, p. 67.

⁶ *Ibid.*, pp. 60-61.

for judgment, at this level, would be to compare the performance of the American economy with that of other economies. A number of attempts have been made to measure the comparative economic efficiency of various countries. One such estimate is published by the *Review of Economic Progress*, giving the levels of real national product per man-hour measured in terms of the quantities of goods and services exchangeable for \$1.00 in the United States during the base period 1925-34. For 1945 the results were as follows: U.S. 99, New Zealand 94, Canada 87, Britain 62, Australia 62, Argentina 42, Switzerland 38, Denmark 31, France 20, Russia 14 (1947), and India 9 cents.¹

While these findings confirm a general impression of the leading position of the United States, considering their statistical and conceptual limitations, they may be accepted only as an extremely rough indication of our relative economic status among nations.

There is still another test, however, that might be used to measure the noteworthiness of our economic growth. Just as we are inclined to criticize a particularly brilliant student who, without trying, exceeds his classmates but still fails to do his best, we may raise the question as to how far American economic growth has measured up to its potential. It may be true as stated by the authors of the National Association of Manufacturers' publication, *The American Individual Enterprise System*, that that system has conferred "more benefits upon its members than any other economic system in human history" (page 15), but such a statement may imply too much. It is conceivable, though hardly defensible, that the record of our economy, however noteworthy in other respects, represents only an indifferent performance considering the resources we have had at our disposal.

Material progress arises basically from developing and applying production functions to resources, and there is little question that American institutions, whatever their correct label, have in the past provided a favorable social environment for the development and application of new techniques and the accumulation of the capital necessary to implement them. But there is a real danger in attributing too much influence to the quality of social institutions and too little to the quality and quantity of available natural resources in accounting for economic growth.

This argument, of course, also runs in the other direction. There are certainly areas in the world where a lack of resources and available techniques to utilize those resources does not account for a failure to make a larger or more rapid economic growth. In such instances it may be assumed that the social and economic institutions have not been favorable to material growth, without implying, however, that there is a unique economic and social system that would permit such areas to

¹ *Review of Economic Progress* (Queensland Bureau of Industry), April, 1949, p. 2.

realize their economic potentials. But unless some way can be devised to estimate the economic potential of a country in terms of its resources and currently available techniques, the relative importance of social institution in economic development will remain a controversial and indeterminant question.

Thus far an attempt has been made to limit the discussion to considerations of material growth. On balance there can be little doubt that judged by available standards America's economic growth has been substantial, but not all would agree that this growth has been identical with economic progress. Even those who are prepared to subordinate all other considerations to a goal of economic strength for national survival in an uncertain world would wish to know more about the types of production, the development or stock-piling of "strategic" materials, and the like before making a final judgment.

Others would broaden the list considerably; in fact there are few who have concerned themselves with the subject who have not at one time or another drawn up a list of American economic goals. One such tabulation is contained in Harold G. Moulton's recent book, *Controlling Factors in Economic Development*. In addition to a progressively higher total national income he lists the following national economic goals: progressively wider division of national income, a society where individual rewards are based upon work performed, increasing economic security, greatest possible development of the capacity of every individual, and opportunities for every capable individual to earn his own income.⁸

However much we may agree or disagree with Dr. Moulton's choice or description of the most important national economic goals held by the American people, it is clear that they vary both in respect to measurability and to the extent to which they can be implemented or achieved through economic means. In the discussion which follows I shall limit myself to a brief consideration of how far we have moved in the direction of the three objectives which seem to rank high among our national economic goals. These are: a more even distribution of income, greater individual and group security, and greater economic freedom.

That there may be logical inconsistencies in attempting to reach these goals simultaneously is not relevant for our immediate purposes. It is only necessary to accept the fact that various important groups have accepted them as worth-while objectives. Nor is it wholly relevant to consider why these goals are derived except that the rationality involved is of interest in itself and indicates in some cases why the means employed to achieve them may be faulty.

⁸ Pp. 142-148.

Of the economic goals noted above, the changes in income distribution should present the least difficult problems of measurement. Even so, both data and the analytical tools to apply to them are far from adequate. For the greater part of our history information on the distribution of incomes is not available. Studies for the period 1910-37 show some tendency, especially between 1910 and 1929, toward greater concentration in income distribution; in 1910, for example, the lower 50 per cent of the income receivers got 26.8 per cent of the total, in 1929 this same group received 21.8 per cent, and in 1937, 21.2 per cent.⁹ These figures, however, may be quite misleading, especially for the period 1929-37. Not only are they unadjusted for income tax payments, but they give no indication of the extent to which the lower income receivers have gained, relatively, through the increase in public expenditures. Nor has it been possible to get any unambiguous measures of the incidence of taxation and expenditure which will permit an accurate analysis of the extent to which there has been a change in effective income distribution. The best guess is that any trend toward greater inequality which may have been true of the 1910-29 period has since been reversed.

Consideration of more even income distribution as a goal illustrates a confusion between means and ends. The arguments pro and con are too well known to warrant any extended treatment at this point. The case for a reduction of inequalities may be based on the simple proposition that it is a "good" objective or on the assumption of a higher marginal utility of a dollar to a low-income receiver than to a high-income receiver. Even when accepting the measurability of marginal utility of incomes, the opposing argument, with considerable historical justification, points out that capital accumulation in America has been much greater than it probably would have been if incomes had been more nearly equal. Fully to make their case in respect to increasing production or maximizing utility on this ground, the proponents of inequality in income distribution must argue that a reduction in capital formation, due to more even income distribution, would have lowered production to the point that a larger percentage of a smaller national income would have actually been less, in real goods or total utility, than the smaller percentage of a larger total. Although studies are currently being made regarding the proper amount of investment, as far as I know there is no way as yet of testing the validity of the argument.

The question of how economic security and economic freedom have been affected over time raises so many problems of yardsticks and data that a complete examination is practically impossible. I shall only outline some of the more obvious points that seem relevant.

⁹ U.S. Bureau of the Census, *op. cit.*, p. 15.

Probably the best place to start in the consideration of economic security is with the causes of insecurity, defining the concepts in terms of the maintenance of incomes. It is perhaps more confusing than helpful to point out that a condition of slavery or serfdom may represent the highest degree of economic security for individuals, although it may be relevant to indicate that the economic insecurity of some four million Negroes in the United States was increased with their emancipation. For the bulk of Americans since 1790 (and before) this does not represent a fair basis of comparison. The more pertinent question is whether our economic growth has been accompanied by greater insecurity. As we moved from a relatively self-sufficient agricultural pattern toward a more highly industrial economy, typified by increasing division of labor and specialization, there is reason to believe that insecurity has been increased. It is sometimes argued, although I am not sure it can be proved, that an industrial economy is more susceptible to business cycles or greater fluctuations in economic activity than a relatively self-sufficient agrarian society. It is probably clearer that with greater specialization the effects of such cycles fall more unevenly and arbitrarily on individuals in affecting their incomes. The impression that the effects on individuals of the depression which began in 1873 were less severe than those experienced during the earlier years of the depression of the thirties may be based upon more than the fact that the latter is closer in time and memory than the former. Be that as it may, there is little tendency to argue that our depressions have historically become smaller and less severe.

This is not the same thing as saying that no progress has been made in removing many of the elements of insecurity resulting from the advent of a depression. Enough measures introduced during the New Deal era have been enacted into legislation to insure a considerably more equitable sharing of the effects of any future depression than was true at any time previously in our history. The crystal ball is more cloudy when it comes to predicting whether we have developed means of avoiding major depressions in the future.

A second major source of economic insecurity has been technological change. Here again the trend toward greater division of labor and specialization, plus the speed with which these changes have been introduced, has made the impact of such changes fall unevenly upon individuals and groups. If we accept the stagnation thesis, innovations will be introduced more slowly than they have in the past. In any event, the effects of technological changes on economic security have long been recognized and both employers and labor groups have taken steps to avoid or soften their impact—a lead which has been effectively followed in recent years by farm groups. On balance it would appear that economic

insecurity arising from technological changes has been lessened over the past few decades.

Whether economic insecurity arising out of occupational hazards has increased over time is almost impossible to measure. Any impression that the expansion of the industrial segment of our economy has increased occupational hazards may be due largely to inadequate information. There is no question that the accident rate both in industry and agriculture is high, but improved medical care, safety campaigns, and insurance have probably tended to reduce the incidence of such risks as far as individuals are concerned.

One source of economic insecurity that seems to be increasing arises from a reduction of the age at which workers are involuntarily retired. There can be little doubt that this kind of insecurity has been a product of an accelerated pace for workers in an industrial society. A growing interest in pension plans may tend to reduce the risks from this source, but thus far the trend has been in the other direction.

One final type of insecurity may be noted, although it is not always directly correlated with income. This has been an increase in psychosomatic disorders which appear to be a concomitant of an industrial-urban society. One authority, Dr. James L. Halliday, has made a diagnosis of Britain which he feels may also be applied to the United States, pointing out how the drives and impulses of the emotional life of the adult have become "increasingly disturbed, diverted, frustrated, or distorted in response to the progressively accelerating changes of the psychosocial environment."¹⁰ It is his belief, for example, that separation from agriculture, with the increasing disregard for the working rhythms peculiar to each individual, greater frustration of manipulative creativity, rapid changes in the structure of society, the increase in standardization and repression of individual expression, and an increasing absence of aim and direction, have combined to increase the incidence of psychosomatic disorders since about 1870.¹¹

The implications of this thesis are far reaching: it would help explain labor unrest, political disintegration, losses in productivity, and a feeling of economic insecurity that may not be understandable in any other way. If true, it suggests that our material progress has come only at a heavy psychic cost.

Probably the principal characteristics of economic freedom are included in freedom of choice respecting the purchase of economic goods and freedom of choice in regard to occupations. The great expansion in the variety of goods and services plus the increased income per capita

¹⁰ James L. Halliday, *Psychosocial Medicine*, p. 121.

¹¹ *Ibid.*, pp. 121-127.

have together increased our economic freedom in the first category. Increased geographic mobility, improved educational facilities, greater specialization, and expanded investment opportunities have all tended to increase occupational choices.

It is relatively easy to identify the obstacles to economic freedom such as discrimination, monopoly, lack of knowledge, and the rest; but it is not easy to measure the extent to which these obstacles have become more or less formidable over the last century and a half. Judged by a great deal of current discussion the restrictions on occupational freedom have increased in recent years, but it would be difficult to establish the proposition that economic freedom is in general greater or less as of the year 1949 than it was in 1789.

There can be little question that the goals of expanded production—a more equal division of income, economic security, and economic freedom—all rank high in the hierarchy of economic values of various groups in our society. They pose a problem for any appraisal of economic progress, however, because in many cases they are mutually inconsistent. More even distribution of income may not be obtainable except through a loss in production—greater security only with a sacrifice of freedom. It is possible that these objectives are not goals, but are in reality only means to some more inclusive goal, as yet not identified nor defined. Unless such an identity can be established we must conclude that our national economic goals are not only diverse but frequently run in different directions; that in attempting to achieve them we will continue to have conflicts among groups, each striving to promote its own system of economic values.

In summary, in appraising American economic progress, we are quite certain that progress has been made in terms of economic growth, somewhat less certain as to how far we have achieved our economic potential, even less certain regarding the movement toward such goals as a more even income distribution, economic security, and economic freedom, and quite uncertain regarding the end which these and other similar so-called "goals" may be means to achieve. In view of their importance in current discussions of public policy, it is regrettable that our means of testing progress or retrogression in respect to these objectives are so inadequate. This inadequacy poses a challenge to economists, economic historians, and social scientists generally to develop the analytical tools and uncover the data which will permit more precise answers to the question raised in an appraisal of economic progress.

CAPITALISM AND INNOVATION

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If we accept the popular definition of capitalism for the purpose of this discussion—the private ownership of the means of production—it is obvious that we are embracing a vast range of economic and social structures which may have, except for private ownership, very little resemblance to each other. It strains the imagination to see much similarity otherwise between the primitive agrarian economy of China or India and the advanced industrial economy of the United States, yet both conform in reasonable degree to this definition of capitalism.

Obviously if this system is so diverse in character and performance, there can be no easy generalization as to its capacity for innovation. The most casual glance at history confirms that capitalism has been highly creative and dynamic in some cases but not in others. Certainly private ownership of the means of production has not been by itself a guarantee of progress. It has been associated at times with some of the most stagnant and tradition-ridden societies on record. It must be acknowledged, on the other hand, that most of the material advancement thus far achieved by the human race has occurred under capitalism. Modern technological civilization is basically a product of private enterprise.

Some may contend this proves nothing save that capitalism, in the sense of our definition, has been historically the predominant form of economic organization. It may be argued, accordingly, that equal or even greater progress would have occurred under socialism. While this contention seems to me improbable to the point of absurdity, it must be acknowledged that good historical comparisons of capitalist and socialist societies are lacking. Except for the contemporary experiments in totalitarian socialism under Russian aegis, we have no modern example of a fully, or even predominantly, socialized economy.

Even if we had an abundance of such examples, however, they would not necessarily provide a fair test of the relative capacities of capitalism and socialism for innovation. For it is difficult to judge the inherent creativeness of a system in constant communication with another. The less creative system can appropriate the innovations of the other and appear in consequence far better than it really is. Soviet Russia, for example, has progressed largely by borrowing the technology previously developed by capitalism. Advances made under these conditions offer very imperfect evidence of what socialism could do if dependent wholly on its own resources. A really conclusive test would require observation

of the two systems over an extended period of time and in complete isolation. We should have to have them on separate planets.

If a completely socialized economy can look better than it really is by borrowing the innovations of capitalism, it is equally true that the socialized sector of a predominantly private economy can both look better and be better than it would as a part of a completely socialist order. It is one thing for the state to run the post office or the railroad system in the context of a competitive market economy, and quite another to run it in the context of a bureaucratically administered economy. The latter is a vastly more difficult task. It is quite improper, therefore, to assume that the progress made by a given nationalized industry in a prevailingly capitalist society is a gauge of its capacity to progress under total socialism.

Even if the verdict of history were clear beyond peradventure as to the relative dynamism of complete capitalism and complete socialism, it would not necessarily resolve the real issue now before the Western World. This issue is not the adoption of one or the other of these systems in its entirety, but concerns rather the most desirable mix of the two forms of organization within the same economy. The real problem, from our present standpoint, is whether public or private ownership is likely to be the more progressive in the particular activities or lines of production deemed to be on the border, or in the debatable area, between the two systems. It is a question of more or less, not of all or nothing.

I indicated at the outset that from the standpoint of its capacity for innovation, private enterprise has a very uneven record. This is likewise true, of course, of public enterprise. I have no desire to argue that bad capitalism is invariably more creative than good socialism, nor do I wish to prejudge the merits of any specific proposal for nationalization. I should like, however, to indicate why I consider good capitalism the most dynamic of all systems of production, and why, therefore, I believe its attainment and preservation should be the supreme object of economic policy. In so doing, I shall be indicating at the same time why the general presumption should be in favor of private ownership and operation in borderline cases.

Good capitalism is the most dynamic system, in the first place, because it offers the widest diffusion of initiative. We have in this country nearly four million nonfarm business enterprises. Each is potentially a source of new ideas and a laboratory for their experimental application. I am aware, of course, that the incidence of innovation falls far short of the potentiality. Real originality is comparatively rare under any system. I am prepared to assert, nevertheless, that a competitive organization of production, with a multiplicity of independent enterprises,

is far more conducive to the generation of new ideas than the monopolistic beauraucracy of socialism can ever be.

It is not only in the generation of innovations that good capitalism is superior; it excels also in their exploitation. There can be little progress without injury to someone. It usually requires painful readjustments. By the same token, there is usually for each innovation some sector of the community whose immediate interest is opposed. The competitive market provides an impersonal mechanism for compelling adjustment that is infinitely more ruthless and effective than political action and certainly more than political action in a democratic state. The right to exploit innovations in a free market is the best guarantee that the price of progress, however painful, will be paid and paid promptly.

These observations can be repointed by saying that good capitalism offers an unequaled combination of opportunity and incentive. Let me add a word about the latter. There has been of late a tendency in many quarters to play down the need for incentives, well illustrated by the dictum of Sir William Beveridge that "only slaves need an incentive to produce." This is pure nonsense. Taken by and large, human beings will not work and strive to the limit of their potentialities without strong inducements. Here we can learn from the experience of Great Britain. Let me quote an editorial in the London *Economist*:

The human donkey requires either a carrot in front or a stick behind to goad it into activity. . . . The whole drift of British society for two generations past has been to whittle away both at the carrot and the stick until now very little of either is left. It is the passion for equality—excellent in itself—that has removed the carrot. The rewards of success have not merely been shriveled, they have been poisoned, since commercial success itself has been turned, in the eyes of wide circles of society, into a positive disgrace. There is a conspiracy of labor, capital, and the state to deny enterprise its reward.

The process of removing both the carrot and the stick has culminated in the extraordinary circumstances of today. Shrunken as were the incentives and sanctions of prewar days, they have now for the time being, vanished completely. Nobody gains anything from activity or suffers anything from inactivity. There is hardly the flavor of a carrot or a shadow of the stick. And yet we wonder why the donkey does not break into a trot.

When I use the term "good capitalism," it is obvious that I am not describing the capitalism of present-day Britain. For if the system is to offer the unequaled combination of opportunity and incentive of which it is capable, it must be vigorously and pervasively competitive, as it is not in Britain. Moreover, it must not be taxed and regulated to death. Its potentialities can be realized only in an environment of comparative freedom.

While wide opportunity and strong incentives are the basic conditions of a dynamic capitalism, I should like, if I may, to touch on a few additional desiderata. The first of these is a high level of general education.

The point may seem obvious, but it is nevertheless deserving of emphasis, that it is impossible to operate, let alone to improve, a fully developed modern capitalism without a high level of popular education, both technical and general. This fact has been repeatedly demonstrated by attempts to introduce even a single sector of modern technology into so-called "backward" countries. Let me quote from the latest annual report of the International Bank for Reconstruction and Development:

Perhaps the most striking single lesson which the Bank has learned in the course of its operations is how limited is the capacity of the underdeveloped countries to absorb capital quickly for really productive purposes. There are many reasons why development is necessarily a gradual process. Of fundamental importance is the low level of education and health prevailing in most underdeveloped countries. Without intelligent skill and vigorous manpower the economic progress of any country is likely to be slow however amply it may be endowed with natural resources and however substantial the assistance of foreign capital.

One of the reasons for the backwardness of British productive technology as compared with our own strikes the investigator at once. We have approximately ten times as many college and university students in proportion to our population as does Great Britain, and an even higher ratio in the technical branches of education. There can be no doubt that the large annual influx of educated youth into American industry has greatly stimulated and vitalized it, both at the technical and at the managerial levels. The maintenance and enlargement of trained manpower is one of the basic conditions of a dynamic economy and should be, accordingly, a primary concern of social policy.

Another desideratum for an innovative capitalism is an intensive development of scientific and technical research. While the day of the independent inventor is by no means over, we must recognize the increasingly dominant role played by group or staff research under the auspices of corporations and institutions. In this country industrial research alone has come to be a 500 million dollar business annually and is growing by leaps and bounds. The more elaborate and complex the technology, the more is progress likely to depend upon such organized research. Certainly we are warranted in listing it as one of the conditions of a dynamic capitalism in the modern world. Here again let me point the moral of British experience, as summarized by the *Economist*:

Spread over the whole range of British industry, the volume of genuine scientific research is very thin. Moreover, apart from fundamental research, there is a lack of willingness to bide the time, or spend the money, for a proper development stage. Most technical advances are not handed to the industrialist on a plate in a finished state. They need long, difficult, and expensive development at every step of which the scientist and the production man must work side by side. This is what is chiefly lacking in British industry.

No one can contend, I believe, that industrial research has yet expanded even in our own country to the limit of its economic potential.

ties. We can look for an even greater expansion in the future and, accordingly, for an even greater contribution to the dynamism of the economic system.

It is not sufficient that the technology of production advance in the laboratories or in design and development departments; it must be incorporated in the installed facilities of industry before it can contribute to increased output. This brings me to a closely related subject—the need for a prompt application of new developments. Naturally, there is a lag between the installed capacity of industry and the best technology currently available. It is vital for progress, however, that this lag be held to the lowest limits economically justified. If you will permit me to refer again to Great Britain, I should like to quote an earlier statement of mine on that country:

So far as we may judge from the territory surveyed by working parties and other investigators, it is safe to say, with only slight risk of exaggeration, that Britain knew how to build great industries but never learned how to rebuild them. At their inception, they were the last word in modernity and efficiency, a model to the world. But they became decrepit with age. What happened was a failure of *re-equipment* policy.

The contrast between original equipment policy and re-equipment policy, so conspicuous in Britain, is by no means wholly lacking in the United States. It is, indeed, fairly common to find long-established enterprises using facilities they would not dream of buying, even for a song, if they were going into business in the first place. In that event, they would probably purchase new equipment all around. If their present policy is correct, however, they should equip a new business by scavenging the mechanical graveyards for the cadavers they now employ.

It is my conviction that one of the principal reasons for tardiness in the application of new productive technology is the lack of any rational procedure or technique for analyzing the replaceability of equipment. For the prevailing methods of analysis are not only quite unscientific; they are in my opinion predominantly weighted in favor of retarded replacement. If this is correct, it is certainly a challenge to the proponents of good capitalism. For if management lacks the means to identify within reasonable limits the proper timing of re-equipment decisions in individual cases, it necessarily lacks the means to maintain the most advantageous mechanization of its facilities as a whole. It fails, accordingly, to realize the full possibilities of technological progress.

I come now to a final desideratum: an adequate supply of risk capital. Modern technological progress is an enormous consumer of capital; hence requires an enormous capacity of society to accumulate it—that is, to save. Almost the entire world is suffering today from a capital scarcity and is looking to this country to make up the deficiency. Whether we ourselves are short of loan capital may be questionable, but I think it apparent that we are short of venture capital. It is venture capital, we must remember, that is the activating and vitalizing factor without which loan capital is impotent.

The great hazard to the accumulation of venture capital and its com-

mitment to risky investment is the excessive taxation of business enterprises and of the larger personal incomes, where the bulk of venture capital is generated. If we wish to avoid the slow degeneration that has overtaken the capitalism of Great Britain, it behooves us to exercise restraint in the taxation of enterprise and risk-taking, for a substantial reduction in the tempo of innovation and improvement is too high a price to pay for the revenue obtained.

Let me summarize this rambling discourse by saying that if modern industrial capitalism is to realize its full potentialities it must first of all be vigorously and pervasively competitive, with all that that implies both for opportunity and for incentives. It must not be debilitated by excessive taxation of risk and enterprise or by undue regulation. It must have a high level of education, with an intensive development of scientific and technical research. Finally, it must achieve a timely application of the available technology to production. I have no hesitation in saying that a capitalism which meets these specifications provides the most innovative and dynamic system of production available to mankind.

CAPITAL ACCUMULATION AND PROGRESS

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The performance and prospects of American capitalism can be judged in terms of how well it promotes these things: economic progress (in the narrow sense of income growth), individual freedom, individual security, and reduction of economic inequality.

The papers by Messrs. Williamson and Terborgh have shown that American capitalism has performed well in combining growth with freedom, but it has a less satisfactory record in respect to security and reduction of inequality. Excessive instability is our system's greatest weakness and the basis of the greatest threats to its survival. Yet it is widely feared that attempts to incorporate more security and equality in the economic system may jeopardize growth or liberty, if not both. Basically, the instability of the American economy is an instability of private investment. It thus concerns the very core of the institution of capitalism as generally defined.

The relation of capital accumulation to progress has been a subject of both learned and popular discussion for a long time, despite the fact that neither capital accumulation nor progress can be measured very satisfactorily. Through most of the discussion runs the thread of faith in continued progress, but also a pretty widespread tendency, now as a century ago, to question the prospect for indefinite continuance of opportunities that would justify the increase of capital at previous rates.

The past two decades have seen some potentially instructive controversies and changes of view, from which this paper will try to draw some lessons. The basic issue has been whether savings should be viewed primarily as a feeder to investment or as a drain on markets.

I

Well into the present generation of economists, the orthodox dogma was that progress depended primarily on capital accumulation and that this in turn reflected primarily the willingness to forego present consumption for future consumption. According to this view, as savings were accumulated they were devoted to increasing the stock of capital goods, thus making possible more efficient production.

In this scheme of thought, saving was the effective determinant of progress. Technological development was always far enough ahead to make use of whatever savings the interest rate could evoke.¹ It was

¹ F. H. Knight and, more recently, W. J. Fellner have in fact gone so far as to say there is never any technical limit to productive uses for additional capital. Such a proposition can never be proved empirically and appears dubious on theoretical grounds.

recognized that the act of saving was not quite the same thing as the act of increasing and improving the stock of useful capital goods, but it was assumed that the workings of the price system would take care of that conversion process without any general or chronic difficulties. Many savers were in a position to put their savings directly into their own business operations (e.g., farmers) and were assumed to save for this purpose. Those not in a position to acquire and operate capital goods would put their savings on the market for use by others. The rate of return on capital was the regulator of supply and demand in this market; if supply tended to run ahead of demand, the rate would go down, with a two-edged equilibratory effect: diminution of the incentive to save and increase of the incentive to acquire the savings of others for creation of capital goods.

"Progress" was thus a secular force that could be counted on steadily to improve the lot of the world, assuming the Malthusian bogey was really dead. The observation that increased living standards, after a point, seemed to diminish rather than increase the rate of natural increase of population gave general confidence that the way was open to a continued upward trend in living standards. Thrifty and inventive peoples progressed faster; capital accumulation, encouraged by thrift and ingenuity, was the determinant of the rate of progress.

II

The Great Depression and the "Keynesian Revolution" marked an abrupt departure from these paths of thought. It became respectable to regard investment and progress as depending primarily not on willingness to save but on willingness not to save.

According to the newly popular views, there was no longer, if ever there had been, an adequate balancing connection between the incentives regulating saving and those regulating investment. Certain demographic and institutional trends, moreover, were blamed for undermining that healthy relationship of saving to investment required for sustained progress. These threatening influences fell into three groups.

First there was the threat of an increasing individual propensity to save. The well-known "law" that rich people save a larger part of their incomes than poor people was rather uncritically invoked by some to show that a general rise in income levels must produce a more than proportionate rise in saving, not only in respect to short-run cyclical changes, but also in respect to secular growth.

Many, including Professor Hansen, were inclined to put more stress on the idea that the inducement to invest was being progressively depressed. This was a more complicated proposition resting on several more or less independent bases. Underlying a good deal of the pessi-

mism regarding investment outlets was simply the perennial unforeseeability of definite directions of radical change, and consequent foreshortening of perspective regarding the future. But in addition to this negative reason for doubting the future of investment opportunity, several positive factors were adduced. These included the slackening of population growth; the lack of further unsettled territories to be filled up; a technological trend from capital-deepening innovations to capital-widening ones and more recently to capital-saving or "capital-shallowing" ones; the growth of restrictive practices by business and labor; and the development of an inhospitable political climate as manifest in taxation of profits, encouragement of higher wages and labor costs, and government restriction and competition.

Finally, in addition to the factors affecting total saving and total investment separately, certain developments were blamed for still further attenuating the functional relationship between individual saving and investment. With the development of large-scale business enterprise and the shrinking relative importance of farms and other small independent businesses, a smaller and smaller proportion of individual savers were in a position to invest directly in businesses operated by themselves or their neighbors. The trend toward equalization of disposable incomes, also, was supposed to mean that a larger part of the saving would be done by people not in a position to make direct business investments. Finally, the maturing of American society was supposed to be showing up in a growth of "security-mindedness." All these factors added up to a qualitative change in the supply of savings: an increasing part seeking safe fixed-return investment and a diminishing part willing to take the risks of equity participation.

In the light of all these influences on saving and investment behavior, the conclusion was reached that the American economy would find it progressively harder to utilize in private investment channels the flow of savings associated with full employment; and that this meant the prospect of an economy missing on some of its cylinders most if not all of the time. In view of this prognosis, the key to higher production and faster progress was not more saving in relation to income but less—or at any rate less saving for assured returns. It was further argued that the government should be prepared to encourage spending, both for consumption and for investment, as a matter of long-run policy, and to take more responsibility for restoring short-run balance between investment and saving in the interest of cyclical stability.

III

It is natural that the rather disquieting pattern of ideas sketched above should have attained coherence and popularity during a period

of deep and persistent depression. The emphasis of economic thinking varies in response to changes in the economic and social environment. Nor is it surprising that the challenge of new ideas developed during depression should have been exaggerated in the urgency of current circumstances and the ardor of discussion, and that a subsequent major turn in the cyclical position should have given rise to violent and likewise exaggerated reaction against the Keynesian-stagnationist challenge. Perhaps in economic thinking as well as in economic activity a combination of continued growth with less instability is to be wished.

At all events, there was a reaction in thought, which coincided fortuitously or not with an abrupt change in the current economic situation. The forties have been a far different sort of decade from the thirties. Wartime diversion of resources and destruction of capital and a postwar boom made doubly inflationary by the war-created backlogs of demand turned our attention to difficulties essentially opposite from those that had been the preoccupation of the thirties. During and after the war, we went in for stimulation of saving via bond campaigns, rationing, and high taxes, while at the same time private investment was restricted and public investment programs, such as roads and schools, were held well below normal levels. So long as inflationary pressures predominated, saving again wore the mantle of virtue and the threat of secular oversaving and stagnation remained in abeyance.

This new set of circumstances was associated, as I have said, with a reaction against the "stagnationist" and underconsumption doctrines of the thirties, which were repeatedly exorcised and pronounced dead. This reaction in many ways went too far. A major reason for this exaggeration of differences, which has done our profession little credit, is the injection of ideological issues and the overuse of popular battle cries on both sides. The Keynesians, underconsumptionists, and mature-economy theorists—if we may thus characterize a somewhat mixed group—were too readily pigeonholed and damned as socialists by their opponents. They had, to be sure, contemplated further redistribution of incomes and a greater assumption of public responsibility for economic stabilization, but in a situation of severe economic distress. Keynes himself, as is well known, regarded his prescriptions, rightly or wrongly, as something to preserve the vigor of free enterprise. Hansen and others discussed sympathetically the need for tax revisions to stimulate investment incentives. It is certainly inexact to dismiss the whole mature-economy school as a sinister revival of Marx in modern dress. It is equally inexact to characterize all of its opponents as political reactionaries. Such coloring of the issues raises the very real danger of blinding us to the lessons to be drawn from the wide gamut of experience and thinking of the past twenty years.

What, then, can we regard constructively as a possible "area of agreement" on major problems of capital accumulation and progress? The remainder of this paper will be devoted to some suggestions.

IV

The relation between capital accumulation and progress itself is by no means rigid. We cannot say dogmatically that the way to get faster progress is to try to promote higher rates of net investment as ordinarily measured. There are at least two qualifying factors to be taken into account.

First, the growth of productive capacity is affected by some important types of outlay that go into the statistics as current expense but might properly, in some ideal social accounting, be classed as investment. The "gross private domestic investment" item in our national product accounts includes individuals' purchases of new houses but excludes most of their purchases of automobiles and other durable goods. It does not cover current outlays for education, research, or health. In the public expenditure sphere, these accounts and orthodox budget practice make no attempt to classify any expenditures as investment, either gross or net. These statistical limitations leave the way open to a spurious identification of the business plant and equipment sector as the only true investment and the sole source of economic progress. All other uses of resources are thus made to appear as a drain on our capacity to grow. Responsible business spokesmen not infrequently have classed public expenditures en bloc as "unproductive" and have gone on to speculate as to how much of this totally sterile load we can afford to saddle upon the truly productive forces of the economy. For the sake of getting a truer basis of judgment it would seem worth while to push as far as possible in the direction of assigning capital values to certain types of public outlays and private "consumption outlays," even though the resulting figures might be too crude to incorporate into the conventional system of accounts.

Secondly, we have probably learned something in the last twenty years about the relation between capital accumulation and progress in the highly restricted sense of the ratio of net business plant and equipment investment to increases in productive capacity of facilities. I think we have learned that this ratio is highly variable. The stagnationist point regarding the shift from capital-deepening to capital-widening to capital-shallowing improvements seems to fit the rough statistical estimates available over the past several decades. Assuming that this trend is not just a statistical illusion, three questions remain open.

1. Is the ratio of capacity growth to net investment likely to continue to increase? I cannot see an answer to this, partly because I am not

clear why it increased in the past. There seems no adequate basis yet for my "law" regarding the prominence of capital-saving innovations even in the life histories of specific industries; and if there were it would still not establish any tendency for the economy as a whole.

2. Does a higher or an increasing ratio of capacity growth to net investment necessarily lead to the technological unemployment of capital, reflecting inability of investment opportunity to absorb savings? I agree with Professor Fellner and others that there is no a priori reason why it should, unless we beg the whole question by taking the rate of capacity growth as given. Whether or not it actually does is another question, still unsettled.

3. May a declining requirement of net investment per unit of added capacity be offset by an increased requirement of replacement investment (i.e., a rise in the rate of obsolescence and replacement of capital)? Some statistical evidence suggests this. For example, plant and equipment outlays seem to show a long-run shift of composition, with construction diminishing and equipment increasing in relative importance. Since equipment is less durable than structures, the effect is an acceleration of the over-all facilities replacement rate. It is also noteworthy that gross capital outlays seem to bear a more consistent and plausible relation to capacity growth in the past thirty years than net capital outlays do. For the question of offsets to gross saving, of course, the gross rather than the net outlays are the relevant magnitude. These things suggest that the frequent practice of theorizing in terms of net investment and stocks of capital may lead us astray; and that we ought to pay more attention, in pure and applied theory, to the relation between gross investment and growth.

So much for the broad secular relations of capital accumulation to progress. Let us now see what, if anything, we have learned about the process of capital accumulation itself.

I think we have learned that we cannot rely on present interest rate and price mechanisms for an "automatic" balancing of saving and investment that would keep business fluctuations within tolerable limits. The following statement made by a well-known economist as recently as 1939 no longer represents the majority consensus of the profession: "whenever . . . new equipment for producing direct goods is much needed, interest and profit rates rise, and, as a result, we invest more and spend less. Thus adjustments in the direction of equilibrium are always being made. The process is automatic, hence economists have no occasion to worry either about lack of opportunities for investment or about a surplus of funds awaiting investment."² We have departed

² Willford I. King, "Are We Suffering From Economic Maturity?" *Journal of Political Economy*, October, 1939, p. 616.

quite a long way from this neoclassical position. Perhaps it is worth while to ask why. I suggest four reasons for the shift of views.

First of all, the violent depression of the thirties demonstrated that the hoped-for stability of the economy was still just a hope.

Secondly, there has been a good deal of theoretical work and some econometric analysis on the relation of interest to savings and investment. This work has directed attention to the importance of factors other than interest in determining savings and investment, as well as the importance of factors other than saving and investment in determining interest. The old trinity of mutual interdependence has fallen apart as a result. In an earlier part of this paper I mentioned some of the institutional developments that support the belief that the tendency to equilibration of saving and investment through interest has had diminishing effectiveness in fact.

Thirdly, confidence in the smooth self-balancing of saving and investment has been shaken further, in some minds at least, by recent work on the theory of investment and growth rates in terms of the multiplier and the accelerator. This line of analysis, seeking to determine the theoretical conditions for sustained growth has not yet developed to the point where its conclusions can be applied directly, much less quantitatively. But it has served to point up, in the simplified logic of mathematics, some of the inherent complications attending the maintenance of steady growth.

Fourthly, we are less inclined to rely on things to work themselves out in tolerable fashion because we have raised our standards of what a "tolerable" degree of economic instability or unemployment is.

All this does not necessarily mean that we have lost faith, or should lose faith, in the usefulness of certain other equilibrators in our economic system, and the possibilities of building still more stability into that system. It has often been pointed out that progressive income taxes, social security, and farm price supports have such a cushioning effect, independent of any flexible exercise of policy at all. No one claims, however, that these act as anything more than partial shock absorbers, breaking the cumulative effects of cyclical swings after they have gotten under way.

The important point is that we no longer regard the decisions of savers as either the equivalent or the effective determinant of decisions to invest.

This has important implications for public economic policy. To fulfill its recognized responsibilities for promoting economic growth and stability without inflation, the government needs answers to two distinct though related questions:

1. What is a desirable rate of investment for the economy (not necessarily the same rate at all times)?

2. What policies will (a) lead investors to invest at that rate, and (b) lead savers to save at that rate?

It might appear a tempting possibility to duck the first question altogether, and just try to keep *ex ante* saving and investment in full employment balance. That of course would be no mean achievement. But I doubt that the setting of a capital-formation objective can really be avoided so easily.

The criterion of full employment stability probably does not by itself prescribe one specific rate of capital accumulation. If a "sustainable" proportion of investment to total output is possible at all (which remains to be demonstrated in practice), then there is probably a range of choice from sustainable high-investment patterns to sustainable high-consumption patterns. We can be sure, however, that there are both upper and lower limits to such a range, and these limits may be quite close together. To adopt a somewhat disquieting analogy, a bicyclist crossing Niagara Falls on a tightrope will surely fall off if he goes much too fast or too slow. An essential part of his job, though by no means all, is to find a safe speed. (There are of course those who say he will fall off anyhow, and has no business being up there.)

Let me make a tentative suggestion as to the characteristics of these lower and upper limits to the desirable investment-output ratio.

The lower limit would be that investment-output ratio that would yield satisfactory stability with least interference with social objectives other than economic growth.

A somewhat higher investment-output ratio might promise more rapid growth of total output, but at the cost of aggravating the problem of stabilization adjustment. Either more instability or more sacrifice of other objectives would be involved, if not both. With higher and higher investment-output ratios, we eventually come to an upper limit, where attempted investment becomes self-defeating: the economy is thrown so far off balance that actually a smaller rate of capital accumulation and progress is realized over the long run.

The theoretical optimum investment-output ratio is at that point between the limits where the desirability of more rapid capital accumulation just offsets the undesirability of the associated increase of instability or of the steps needed to prevent that increase.

The use of words like "desirability," "satisfactory," and "social objectives" in this rough statement makes it amply clear that the limits themselves, and *a fortiori* the choice of appropriate investment-output ratios between those limits, depend in part on "political" determina-

tions by informed economic statesmanship or by the push and pull of pressure groups which have differing evaluations of stability and progress. Herein lies the case for assumption of some public responsibility for developing over-all investment objectives.

V

What now of the foreseeable future? A major factor in judging its prospects and the problems that policy must cope with is the answer to that basic question on which there have flowed such violent tides of opinion in the past two decades. Will the limit to investment be too much saving or too little?

Some have been so impressed by exaggerations of the stagnationist views and by the inflationary climate of the past nine years that they are willing to revert to the neoclassical position and even beyond. Once again we are told that the effective limit on investment is going to be the willingness of savers—that our major problem in the next few decades will be not unemployment but inflation and scarcity of capital.

If this rests on an assumption that public policies will be followed that will keep the economy on the brink of inflation, it is a highly optimistic begging of the question. Presumably a successful policy for promoting full use of our resources would indeed keep us on the brink of inflation, with constant vigilance needed to see that we did not go too far. But I see no reason for thinking we have already assured that outcome. This would be ignoring the lessons of the thirties with a vengeance.

Those who agree on the prospective prevalence of inflation generally also agree that inflation ought to be curbed, not by restricting investment, but by stimulating saving. Some go so far as to say we ought to stimulate saving enough to make effective without inflation an increased ratio of investment to total output. In this view, the fear is that *ex ante* saving will fall short of "needed" investment, which is held to be a larger part of total national product than at present.

This group does not conceive of the inadequacy of prospective investment as being in the government sector. The fear is rather that government will be absorbing so large a share of the limited total flow of savings that business will not find enough savings left to finance the business investment that the economy "needs." Reduction of upper-bracket personal income taxes and of corporate taxes is proposed as the remedy.

The foregoing assumes, of course, an inflationary situation in which over-all savings really are scarce. But I believe that in such a situation the existing tax structure, with the levels of expenditure implied by en-

actment of the President's social welfare proposals and with no large increases in defense and international outlays, would leave a federal cash surplus. The same objective is an essential part of the C.E.D. plan for "automatic" stability. Thus the federal government, at least, would be making a direct contribution to savings as long as such an inflationary situation persisted.

It is quite true that such a surplus might not have the full anti-inflationary effect that oversimplifications of fiscal theory have sometimes assumed. The real question, however, is whether the present progressive tax structure is likely to reduce savings in a full-employment situation in such a way as to curtail business investment below "desirable" levels.

Evidence bearing on this important question is scanty. Some of the "stagnationist" fears of chronically excessive saving were clearly based on inadequate evidence or faulty reasoning. Few of us now believe, for example, that the proportion of personal income saved is subject to a rising secular trend just because people gradually get richer and the rich save more of their incomes than the poor. On the other hand, I see no reason for expecting the savings ratio to fall markedly because of low interest rates, increased equalization of incomes, urbanization, an increased proportion of dissaving oldsters, or other factors mentioned by critics of the stagnationists. All these things have already occurred, leaving the ratio of personal saving to disposable income if anything higher than in the twenties. I think it is agreed that the 1948 or 1949 ratio is a better indicator of the prospective high-employment norm of savings behavior than are either the high wartime ratios or the unusually low ones of the 1946-47 inflation and restocking periods.

This suggests that a future full employment situation with a tax structure similar to the present one would not interfere with the adequacy of personal savings any more than it did in 1948. Moreover, we should take account of the delayed rise in depreciation allowances still to come, reflecting the past rise in construction and equipment prices, and the fact that business in 1948 was still replenishing inventories at an abnormally high rate. It seems reasonable to conclude that, so far as the over-all supply of savings is concerned, there is no reason why private investment in structures and equipment during the foreseeable future could not be at least as high in relation to total national product as in 1948.

The ratio of such investment to output in 1948 was very high, by historical standards. It is still possible to argue that we "need" to keep it still higher, year after year, for the next twenty-five years; but surely before we reverse the whole direction of government policy,

specifically in regard to progressive income taxation, we should want some proof of so radical an assertion. I suspect the assertion would also cause some soul searching on the part of the business community, which has been proclaiming consistently since the war that its heavy investments in plant and equipment were part of an abnormal "catching-up" effort, and that the completion of postwar investment programs must be followed by a slackening-off to a more "normal" rate of plant and equipment outlays which would still be quite adequate to keep up with the growth of the economy and to exploit opportunities for profitable modernization. In this attitude there seems little support for the belief that investment would be significantly encouraged if more savings were made available by reducing upper-bracket and corporate income taxes.

But perhaps the cleavage of opinion is not so wide as would appear. I have deliberately ignored so far one important point which I think provides at least a limited area of agreement. Despite differences of opinion on the deficiency or excess of total savings, most people will agree that it would be desirable to have the supply of savings more closely match the demand in respect to contractual terms. Too much of the saving, relatively, seeks assured returns, and too much of the investment demand seeks venture savings. A better reconciliation of these reasonable but conflicting preferences could encourage new and progressive lines of investment, and promote stability not merely by facilitating the over-all balancing of saving and investment but also by retarding the growth of debt burdens and unsettling fears of illiquidity.

I have neither the time nor the wisdom at this point to translate this general objective into specific policy proposals. But I think it offers useful criteria for evaluating a number of such proposals.

Thus we may say that measures to aid investment indirectly, through increasing the total flow of savings, are *prima facie* less desirable than those which stimulate investment directly by reinforcing incentives and diminishing individual risks. Measures taken in regard to savings should not simply increase or reduce the total amount, but should open better channels for the flow of security-minded savings into equity investment.

Among the stimuli to investment that do not work through an over-all increase of saving and are thus to be regarded with favor, one should include that reliable standby—the encouragement of technical and business research. There is also a field of action in which Mr. Terborgh has been doing important pioneer work: education to correct biases in conventional business analysis methods that understate the prospective profitability of investment.

The more promising tax changes appear to involve not a general shifting of tax burdens from corporations and upper-income groups but rather concessions designed to favor investment in new and uncertain undertakings. The importance of investment by new and small enterprises is out of proportion to the dollar amounts involved, because it encourages competition, individual initiative, and flexibility.

More important than tax changes, I think, is the development and greater use of intermediary institutions to finance new and smaller businesses on longer and more flexible terms. The mere pooling of individual risks provides, of course, some reduction in collective risk. When such financing is combined with continuing technical and management assistance, both the expenses and the risks attendant on small equity financing are reduced.

DISCUSSION

YALE BROZEN: I would most certainly agree with Mr. Hoover that a very important conclusion to be drawn from the experience and the controversies of recent years is "that we cannot rely on present interest rate and price mechanisms for an 'automatic' balancing of saving and investment." I would attach the warning, however, that this does not mean that there is no interest rate and price mechanism which can "automatically" balance saving and investment.

Although "we no longer regard the decisions of savers as either the equivalent or the effective determinant of decisions to invest," there is certainly much we can do to produce greater equivalence without using administrators to decide how much "offsetting" action should be taken. Capital accumulation at the "right rate" and full employment may be essential to progress, but my conception of progress also includes the notion of a movement in the direction of greater "wholeness" and "sovereignty" for the individual. Insofar as our society gives each individual ever greater capacity to control his own fate and to realize fully his own capabilities, our society is progressing, in my view, and, I believe, in the view of the traditional American creed.

With this conception of progress in mind, it would seem to me that we should organize ourselves in a manner such that the decision by individuals to save does not require decisions by government officials to invest. There is a proper area for government investment, but this area is defined by discrepancies between social and private returns and between social and private costs,¹ not by the discrepancy between *ex ante* private saving and private investment. If government officials are to make investment decisions reaching into the latter area, they will be deciding for individuals what goods they should and can have and what jobs they should and can fill in a much broader field than that defined by the first set of discrepancies. When private investment outruns *ex ante* saving, they will be curtailing capital construction in the first area which should be publicly undertaken in order to fulfill efficiently private demands.

If the discrepancy between *ex ante* private saving and investment is not met by increases or decreases in government investment (or, correctly, we should simply say government spending), then it will be met by devices intended to control *ex ante* saving. The latter program is as unacceptable in the American credo as the former. Once our tax and property structure has been geared to produce an equitable division of income, it should not be corrupted by the necessity of being regeared to produce a "proper" propensity to save. If the division of income is fair, then individuals should be allowed to do with it as they will, including even the devotion of it to such foolish uses as saving, if that is what they want. Otherwise, we find ourselves compelled, in periods such as the recent years in which *ex ante* private saving has fallen short of private investment, to advocate regressive tax structures in order to

¹ Return and costs measured in terms of the interests of the individuals affected as they see their own interests.

produce greater *ex ante* saving if we are to avoid the wastes, dislocation, and social turmoil associated with marked inflation. I, at least, am unwilling to adopt an intellectual position which can force us back to the kind of income distribution associated with the value systems of pre-French Revolution societies in which only the elite are to have the good things of life and other men are but the means of producing those things for the chosen few.

To return to Mr. Hoover's point that *ex ante* saving does not result in capital accumulation and economic progress unless it results in investment, in the absence of "offsetting" governmental action, how are we to meet the problem of the discrepancy between the two and yet avoid the rape of the values which define the goals toward which we must move if the movement is to be regarded as progress? Essentially, we must discover devices and methods for reshaping institutions in such a way that changes in *ex ante* saving will produce the necessary changes in investment.

We have been told that the effect of changes in saving on the interest rate, if any, will not produce changes in investment because (1) the interest rate is already close to or at a minimum dictated by the costs of making and servicing loans or (2) businessmen are affected primarily by investment prospects and pay little attention to the interest rate on loans in making their plans. I should like to submit, aside from the question of the validity of these generalizations, that the interest rate on loans is of negligible importance because it is not the interest rate, if we mean by the interest rate the rate of the return that must be offered in order to get funds. The experience of corporations that can sell bond issues at 3 per cent or notes at $1\frac{1}{2}$ per cent is no indication that the cost of raising funds is at that level. The indebtedness of such corporations is a preferred risk, often being of a class that can be categorized as near-money. Such indebtedness requires an equity base, and the cost of this base is a part of the cost of raising funds by borrowing. Those same corporations find it necessary to offer 7 per cent more in selling their stock issues, if the recent experience of American Telephone and Telegraph is a criterion. In offering a return of 7 per cent on funds raised by a stock issue, a concern must earn in excess of 11 per cent on the funds before corporate income tax in order to have enough left to pay this return. I do not think we can dispute the fact that the necessity of earning 11 per cent on an investment will cause a plan which will yield anything less than that to be shelved.

When we turn to companies smaller than A. T. & T., the issues of which are not blue chips nor even well known, we find, according to SEC studies, that the cost of selling such issues ranges up to 23 per cent of the proceeds. In order to promise a return sufficiently attractive to obtain purchasers, the small company must be able to look forward to a 15 per cent return on its prospective investment, assuming potential purchasers of stock are willing to accept a net yield to them as low as that on A. T. & T. new stock issues.

A state of affairs in which investment plans promising 10 to 15 per cent yields must be shelved for lack of funds cannot be said to be one in which there is inherently insufficient private use for savings. Our problem is not one of creating more investment uses. It is one of breaking down the institutional barriers which inhibit the flow of funds into the private uses already available

—barriers which prevent private individuals from deciding how their savings are to be used and, as a consequence, create the pressures for governmental decision making as to how much saving is to be done and what investments are to be made.

In order to furnish a few examples of the action necessary to keep decision making in the hands of individuals and diminish the necessity of economists playing God in disposing of human lives and destinies, let me quickly mention some of the measures which can be undertaken. An immediate step would be the elimination of any further issues of securities carrying exemption from the personal income tax. The very persons who have large enough fortunes to afford the necessary diversification of risk when investing in new projects of companies of the nonblue chip variety find it more advantageous to invest in a 2 per cent bond of some municipality than in a 7 or 8 per cent bond, much less common stock, of a private company. On the other hand, the individual of small means who would invest in a secure use, such as a municipal bond, finds these issues bid away from him. He cannot risk all his eggs in the one basket of a private issue, and, lacking the means to diversify his risks by buying several issues, perforce turns to money as his only "secure" investment, although the security of this investment is certainly doubtful. I would venture to suggest that the marketing cost of small issues might be cut to one-half or less if only a few individuals, who can afford a diversified portfolio, have to be sold the virtues of an investment instead of many individuals who are not in a position to participate in a risky venture. Anything of this nature we can do to reduce the return required to convert the money saving of an individual into an investment chosen by the same individual will add to the backlog of securities waiting for a market and will consequently mean that the rate of saving will determine the rate of sale of securities and the rate of investment. The liberal loss carry-over provision proposed by Mr. Hoover would also serve this purpose.

Another suggestion serving the same purpose is the requirement of 100 per cent reserves for the banking system. I see no more reason for permitting a group who happen to be bankers to make decisions which force individuals to save or dissave than for permitting a group who happen to be government officials. My reason for proposing this, however, is to couple more closely investment with voluntary individual saving decisions. The enterprise which turns to a money creating group to force saving for the financing of its investment program when insufficient voluntary saving is available is removing a use for voluntary saving when such does become available for its particular program. If it chooses to refinance its investment by later using voluntary savings to repay its bank borrowings, it then forces dissaving, assuming that lack of influence of interest rates in investment planning at least applies to bank rates and this is done at a time when voluntary saving is available at such terms to all enterprises that repayments to banks exceed new borrowing.

It might be mentioned, incidentally, that the prevention of forced saving in times of active demand for investment goods, which is the time when this occurs, prevents undue expansion of investment good industries. This miti-

gates the problem of reallocating resources from investment good industries in case of a later decline and would contribute to greater stability. Since instability is one of the barriers to the flow of money savings into investment, such action would contribute to the removal of still another barrier.

Another suggestion is the encouragement of investment trusts which provide an outlet for small savers who cannot otherwise diversify their risks. Such trusts are already growing rapidly. Unfortunately, the major growth has occurred in trusts which specialize on seasoned blue chips instead of directly providing funds for new real investments. Perhaps we should give some sort of preferential treatment to trusts which specialize on new issues, although I would approach this notion of preferential treatment very gingerly.

The recent proposal of joint insurance-company—bank long-term loans is a step in the proper direction. I would prefer that the banker operate as an official of a local investment trust rather than as an officer of an institution which can create money, however. Also, I would prefer that the funds turned over to insurance companies for investment were, instead, funneled into investment trusts not restricted predominantly to debt financing. Insurance companies could then tend to their knitting in their proper field of insurance instead of confusing the sale of insurance with the sale of savings programs and, as a consequence, confusing the objectives of their investment program as well as confusing their customers.

Several other devices, such as making dividends paid out deductible from corporate incomes subject to tax, for keeping saving and investment decisions in the hands of those affected by them could be mentioned. The essential point is that there does exist an alternative to the necessity of governmental controls over saving and investment—an alternative which does not corrupt the division of income nor rudely intrude into the lives of individuals. These alternative devices permit the growth of freedom and enlarge human capacity for responsible freedom instead of inhibiting or destroying such progress in the name of maintaining employment and material plenty, yet give us these latter forms of progress as well.

DAVID MCCORD WRIGHT: Our subject is "Capitalism and Economic Progress." Some people, I know, do not feel that economic progress is a matter of very great importance, but I believe they are in the minority. In 1946 two sociologists, Centers and Cantril, sent out questionnaires to a cross section of the American population asking them how much more income they needed to make them feel "happier and more comfortable."¹ In 68 per cent of the replies an income increase of 86 per cent was felt "needed." So you see economic progress is still a subject of some interest to a good many people.

Now concerning economic progress, one fundamental question appears to me to run through all three papers on this program. Democratic capitalism, all the speakers imply, has been on average a very productive system. But

¹ Krech and Crutchfield, *Theory and Problems of Social Psychology* (New York: McGraw-Hill, 1948), p. 543.

what is the secret of its productivity? As Dr. Terborgh correctly states, it cannot be mere property rights—nor can it be mere science or mere resources. What then is it? It will be helpful, I believe, to sketch in here, in this connection, an eightfold classification of the requirements for social growth which I am using in my forthcoming book on *Capitalism*. I should explain, however, that my classification is not intended merely to apply to capitalism but to be broad enough to apply to any economic system.

The universal requirements of social growth are, I submit, as follows: (1) natural resources, (2) labor, (3) knowledge and education, (4) saving, (5) enterprise, (6) ideology, (7) a degree of stabilization, (8) criticism.

The first three requirements—resources, labor, and knowledge—are, I believe, obvious. The fourth—saving—is more controversial. But by saving I mean merely nonconsuming. And I do not believe that one needs to explain to a literate economic audience that civilization requires a stock of capital of some sort, and that capital cannot be formed without involving some nonconsuming—however induced. This principle, of course, does not commit one to any implication that all nonconsuming, under all circumstances, must be useful.

Yet concerning the problem of nonconsuming, and of possible “over” saving in general, there seems to me a curious one-sidedness about the left-wing approach. Many left-wing writers simply take as “given” the fact that at some particular time nonconsuming is not resulting in capital investment. They jump at once to the cry of “down with saving.” But surely it is at least equally reasonable to go at the matter the other way and to say not “down with saving,” but “up with investment,” and to consider, in addition to the factors which are inducing saving, those which are preventing investment.

Such an inquiry immediately leads, among other things, to our fifth requirement: enterprise. Here I use the Schumpeterian definition of the innovator as opposed to the mere manager and I do not confine the word entrepreneur to capitalism. Not only does it not include many who are nominally businessmen but also it does include numerous people who are not businessmen at all. Anyone who both conceives and puts across a new social or technological pattern is, to me, an entrepreneur, and Joseph Stalin no less than Henry Ford goes down as one of the great entrepreneurs of history.

So far our classification sticks pretty closely to accepted economics, but I feel that it is seriously deficient. I have become increasingly impressed with the idea that social progress depends on a far more complicated and elusive series of factors and attitudes than mere resources, labor, etc. Accordingly, I have added a sixth requirement: ideology. For just as saving cannot in the long run be useful without entrepreneurs to implement it, so also entrepreneurs in any society cannot be useful without some form of protective ideology which allows them to function. There are two principles here, both of which need to be remembered. Change, we all know, cannot occur in a society whose social pattern is too rigid. But, as Dr. Carter Goodrich has stressed, entrepreneurs also cannot function in a society of pure anarchy. It is necessary, therefore, to balance the principle of harmony and the principle of conflict—and to realize that there must be both stability and instability, competition and

co-operation. This is Whitehead's problem of social symbolism—perhaps the most basic issue of social life. We are very far, as yet, from a full understanding of the delicate balance of attitudes which permitted the achievements of the nineteenth century.

Our seventh requirement—a degree of stabilization—is merely the economic reflection of what has just been said concerning ideology. If we allow too disastrous a collapse in slump we may wipe out all the gains of the boom. Finally I must mention briefly an eighth requirement: criticism. It ought to be clear that a mere increase in output is not necessarily progress. I grant that we as economists can say little on this point. But that is no grounds for forgetting it.

I do not know whether this list of requirements has helped the audience or merely bored it. But whatever its inadequacies, I do believe it is valuable in indicating how broad must be the scope and how vast the range of any true theory of growth under capitalism or any other system. I have only enough time left now for a few notes on ideology.

It seems to me that one of the most profound social forces now operating is the present shift from active to passive ideals of the good life. I wonder if it is altogether coincidence that the period which gave the first unqualified majority to a socialist government in England was also a period which saw a great interest in yogism in literary circles. There was, for example, Somerset Maugham's *The Razor's Edge* and Aldous Huxley's *Time Must Have a Stop*. Not enough, I would like tentatively to suggest, has been made of the infiltration of Hindu attitudes into English economics and through them to us.³

But it is a bastard orientalism which now influences us. For while we seem to be adopting their emphasis on the value of secure routine rather than activity and appear increasingly to believe that it is better to be down and sleeping than up and doing, still we also cling to the Western notion of desiring an ever rising standard of material welfare. This creates a tremendously explosive situation. For rising material living standards must come through growth, growth involves change, and change involves constant and recurrent upsets of work routines and job security. Thus we desire a rise in output while our security schemes hold it back. It is not the introduction of novel social ideals per se which disturbs me but the adoption of violently conflicting novel social ideals.

But just as the West is being influenced by Eastern ideals of otherworldliness, so also the East is being influenced by Western ideals of material plenty. Though I do not wish to say anything to "soften" our attitude toward Red China—far from it—still from an extremely long range point of view, and without reference to immediate politics, I sometimes dare to suppose that possibly some day the communists may come to be viewed in retrospect as the missionaries of capitalism to Asia. For the communists are always the

³ Keynes worked in India. Tawney, I believe, was the son of an Indian civil servant. Beveridge's parents were missionaries to India. Pigou commences the *Economics of Welfare* with a chapter on the futility of mere rising output per head taken almost entirely from Rabindranath Tagore. It would be ridiculous, however, I should hasten to add, to suppose that our sole source of oriental thought was either England or English economists. I am only calling attention to an interesting coincidence.

apostles of material welfare through industrialism. Could it not be that by kindling a desire for, say, washing machines, a desire which I am convinced they will not possibly be able adequately to satisfy,³ they may, by a truly Hegelian paradox, turn the minds of Asia toward the system which if it has given nothing else has certainly given gadgets ad infinitum.

RALPH W. Hidy: Professor Williamson has written his paper in the best academic tradition. He has made a careful appraisal of statistical measures of American economic progress in terms of economic growth. In the course of that appraisal he has, with characteristic thoroughness and caution, pointed out some of the limitations of the statistical evaluations and has taken cognizance of many of the areas in growth which have not been measured. He correctly intimates that many cannot be measured. In fact, he has tied up his parcel so neatly and securely that one can only suspect that he was endeavoring to preclude anything but agreement with his paper. It is, no doubt of it, a praiseworthy summary of our situation as economic historians in evaluating economic progress in the United States.

However, the speaker's numerous qualifying statements induce me to emphasize the fact that our measurements are comparatively few and not altogether trustworthy. Try as we may to achieve accurate statistics on economic growth and change, we are still impressionists to a very large degree when we write any kind of history, including economic history. The inaccuracy and inadequacy of early data have been mentioned. The point can be elaborated by any one who has studied the history of any industry.

More significant is the fact that when the functioning of any segment of the American economy is analyzed historically, we immediately perceive numerous items which have not or cannot be measured. In that connection Professor Williamson mentions technical knowledge, skills, and work habits of the labor force. If data were available, what a series of time series would be needed for the hundreds of occupational groups in the United States! Beyond that would be the problem of weighting to construct a composite series. Yet, lacking accurate data as we do, we cannot ignore the issue; we must present what scattered facts we have to further our understanding of changes in the technical knowledge, skills, and work habits of both manual and white-collar workers.

In my estimation Professor Williamson could have said more about the inadequacies of per capita income statistics. Many families and individuals in our society have much added to their income through tax-supported schools, libraries, health and sanitative services, hospitals, police force, and the like. Hundreds of thousands of people receive free service from doctors, dentists, and other professional people. Large as those additions to personal income loom in the aggregate, it is practically impossible to measure them with any degree of accuracy. Nevertheless, we cannot disregard them in assessing growth in income as an indication of economic progress.

³This line of reasoning, in my opinion, makes it all the more important that we should neither lend to communist China nor even, I should say, trade with it. For any trade we do is bound to help them more than it helps us.

Some reference should be made to the increased productivity of labor and the implications of that change. There is undoubted evidence of the increased production per unit of labor in many industries over the last ten decades. But what does that evidence of progress represent beyond the fact stated? Involved in it certainly are indications of advances both in invention of machines and in skillful utilization of labor by management. How much of the increasing productivity per worker is attributable to the worker himself, to the inventor, to the manufacturers of the machines, and to the employer of the worker? Incidentally, is it not time that greater attempts be made to appraise the efficiency of management over the years as a contributor to economic progress?

In the discussion thus far no mention has been made of the price of progress. The inventory type of measurement has been cited; the balance sheet approach should also be considered. Ofttimes new methods have been tried and found wanting. The innovators suffered the loss. In the historical process, growth in productive efficiency has been accompanied by the sloughing off of the submarginal methods of operation. Technological unemployment and low pay to workers in the past contributed to the development of slums which remain an unsolved economic problem today. Some destruction has been as much a part of growth and change as the creation of more efficient means of production. Losses have been incurred which must be entered in our profit and loss account.

In connection with the idea that some tearing down of the old is a function of growth, I enter a plea for a fuller recognition of that development as a part of the normal course of history. Until recently in the United States we have failed adequately to incorporate that concept into our thinking. Some effort is now being made to soften the impact of changes, but in the past affected groups of the American people have either experienced an emotional explosion at the results of change (the reaction to the emergence of big business is a case in point), while others have indulged in inordinate and uncritical boasting of economic changes without any consideration of the cost. We need to recognize and to teach widely that the elimination of submarginal units of production is as normal a part of growth as the scrapping of obsolete equipment in a plant.

I have emphasized just two points. One is that in spite of advances in measurement of various factors in economic progress, historians must continue to be impressionistic in their analysis. There seems to be no alternative because the subject matter of economic growth is so complex and so comprehensive. In fact, one suspects that statistical measurements afford only the bare contours of the picture and that our efforts as historians often resemble those of Dali more than those of Manet. Secondly, I have suggested that the price of progress be recognized and assessed. I am wholly in agreement with Professor Williamson's conclusion that the inadequacy of our knowledge poses a challenge to social scientists generally.

STABILIZING THE ECONOMY: THE EMPLOYMENT ACT OF 1946 IN OPERATION

THE COUNCIL OF ECONOMIC ADVISERS: POLITICAL ECONOMY ON TRIAL

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The Employment Act of 1946 has been described as a general statement of policy with which no one could disagree unless he was an advocate of detailed economic planning or an advocate of extreme laissez faire. The overwhelming majority by which the Act passed both houses of Congress may be cited to give support to this view. Under such an Act the work of the Council of Economic Advisers assumes special significance. Although the Council of Economic Advisers is an advisory agency and has no authority to enforce its views, the Employment Act of 1946 placed it in a strategic position to formulate plans and programs and, in effect, to give real content to a general statement of policy with which few could disagree.

The tremendous importance of finding a solution to the problem of economic stabilization is recognized by groups with widely differing points of view. It is generally believed that public opinion will no longer tolerate fluctuations of the magnitude or duration familiar in the past. It is also agreed that positive government action can prevent extended periods of depression or inflation in the future. Differences over the degree of stabilization possible or desirable and the underlying causes of fluctuations have led to differences in proposed methods of attacking the problem. Nevertheless, there is a wide area of agreement among students of stabilization policy.

In one very important area, however, much more work needs to be done and more experience is required. This is the analysis of the practical problem of administering a stabilization program. One of the most important aspects of this problem is the consideration of the effects of alternative policies upon the economic, political, and social structure. This is a job for the political economist. Success will depend upon his ability to bring all the tools of the social sciences to bear upon the issue. Pure economics must be used to analyze the economic variables but the political economist must be willing to give equal consideration to the administrative and political aspects of the problem. There is still a need for pure research into the basic economic issues but the possibility of increasing the effectiveness of government stabilization

devices requires the development of political and administrative understanding and methods of control even more urgently.

The Employment Act of 1946 and the Council should not be criticized if in three years the final goal of stabilization has not been achieved. The Act and the Council should be criticized if in this period it has not made full use of existing knowledge in attempting to solve the problem of periodic fluctuations.

Under the terms of the Employment Act the Council has assumed four main functions: first, the constant review and appraisal of the economic health of the nation; second, the formulation of stabilization plans and programs designed to correct both short-run and long-run fluctuations; third, the appraisal of all types of economic plans and programs arising in all the various agencies of government and in the private sector of the economy with the purpose of determining their effect on economic fluctuations; fourth, the education of the public and government officials to increase their understanding of the problem and issues which is required if co-ordinated action to correct maladjustments is to become possible.

Appointment to the Council is made by the President with the advice and consent of the Senate. The immediate impact of the Council is determined, largely, by the extent to which the President accepts or rejects their advice. Assuming that the President accepts their advice there is still no provision in the Act for translating it automatically into an action program. No new authority was granted to either the President or the Council under the Act. Congress still reserves the right to act or not to act on any of the President's recommendations. The discretionary authority of the President has not been increased. In fulfilling its functions, therefore, the Council must consider the political acceptability of its stabilization recommendations. This does not mean that it must follow a policy of political expediency, however great the temptation to do this may be. It does mean that the job of achieving the goal set forth in the Act is much more difficult than generally recognized by economists who choose to ignore the political and administrative aspects of the problem. If the President chooses to ignore the advice of the Council, its influence will be negligible; or if the Congress wishes to ignore the advice of the President, little can be accomplished in the short run.

Assuming the President gives weight to his Council's recommendations, they will become significant influences upon the economic and political structure and should be appraised accordingly. The Act clearly acknowledged this aspect of the problem when it stated the government should use its powers in "a manner calculated to foster and promote free competitive enterprise." Success or failure of the Council will be

determined by its ability to help achieve full or high-level employment within the framework of the market system and democratic government. The political economist must find practical means of solving this problem of stabilization within the framework of a democratic society.

A review of the work of the Council must be based primarily upon the reports of the Council, the *Economic Reports* of the President, and, more recently, the *Reports on the Economic Situation* prepared by the Council to accompany the President's report. From this record it is impossible to determine how much of the content of the President's report is a true reflection of the Council's views. However, their concurrence is assumed on the basis of the close parallel between the Council's own reports and those of the President.

There is general agreement that the Council has done a good job in presenting the basic statistics necessary to appraise the trends in the economy and its status at any particular time. The reports of the President and the supporting reports of the Council have included almost all the information that any such summaries could include and have been well organized and lucidly presented. The statistical appendices of the semiannual reports and the *Economic Indicators* have been especially well received and are a very useful summary statement of the basic data available. As a result, the business community and the public at large has undoubtedly a better understanding of economic conditions than ever before.

However, two criticisms of this aspect of the Council's work can be made. First, the Council has not been content with a summary of conditions and trends in the past but has attempted to predict developments in the immediate future. These forecasts have been well hedged but have, nevertheless, been used by the Council and the President as the basis for legislative recommendations. The results of this attempt at forecasting have been unfortunate. In the January, 1947, report of the President, his conclusion and the conclusion of the Council that there was immediate danger of a depression led to the minimization of the immediate problem of inflation. No positive program to check inflation was recommended and emphasis upon the unfavorable outlook for the next year probably weakened public resistance to inflationary policies in both the private and public sectors of the economy.

In the January, 1949, report of the President and the supporting Council statement, the balance was weighted in the direction of inflation. Changing conditions made the President's recommendations for legislative action based upon this prediction seem rather futile almost as soon as they were made. Although the Administration did not push the program in the later months it remained the official program until

the middle of the year. This might have been avoided if the President had not been so firmly committed to the program outlined in January. The danger is both that inappropriate action may be taken in face of changing conditions and that the failure of the Council and the President to respond rapidly to changed conditions will discredit their future recommendations to the detriment of the whole program.

The second criticism is that the reports of the Council and the President have given a disproportionate weight to the various social, welfare, and other economic programs of the administration bearing only indirectly upon the immediate problem of economic stabilization. This criticism does not mean that the Council and the President should fail to appraise all economic programs and determine their impact upon the economy, but rather that the advocacy of welfare legislation within the economic report of the President tends to direct attention away from the main issue the Act was designed to solve: the prevention of, or great reduction in the severity of, business fluctuations. For example, the anti-inflation program of the President in the January, 1948, report was generally discounted when he advocated legislative action to curb inflation but suggested specific legislation which included measures with inflationary implications, such as a major housing program, and the cost-of-living tax credit of forty dollars. Their inclusion in this report did much harm.

The inadequacy of the reports of the President is further underlined and better understood when the position of the Council upon specific stabilization measures is reviewed. In the Council's own reports and in the public statements of Council members, stress has been placed upon the fact that changing business conditions do not follow any consistent pattern and that each situation is in many ways unique. With this few economists will disagree. However, the Council has seemed to draw from this generalization the conclusion that no general stabilization devices can be developed that will operate more or less automatically and that such devices do not merit serious consideration at the present time. Specifically, the Council in its first report disposed of fiscal policy, with minor exceptions, as "the Roman doctrine of an external remedy." Although later reports have shown that the Council realizes the need for positive fiscal action, it has been unwilling to publicly consider the desirability of strengthening this instrument of control.

Monetary policy was lumped with fiscal policy and over the three years of the Council's life has been even more neglected. The issue of debt management policy has been largely avoided. Explaining this neglect in part and in turn reflecting the attitude of the Council is the

fact that there has been no full-time senior staff member who has been primarily concerned with monetary policy. Difficult questions of the relation of the Council with the Federal Reserve System and the Treasury exist and may also explain the Council's failure.

Although the Council can take pride in its consistent advocacy of the maintenance of high taxes throughout 1948 and the need for budget surpluses to check inflation, it has not been willing to give wholehearted support to proposals calling for increased budget flexibility over the cycle. To assure effective action the speed with which revenue and expenditures can be varied must be increased. In view of the widespread acceptance of monetary and fiscal policy as the best available means of establishing and maintaining generally favorable economic conditions within a private enterprise system, the position of the Council can be viewed only with great surprise and with equally great concern. Although there are some advocates of monetary and fiscal policy who are guilty of exaggerating their beneficial effects and many who neglect the tremendous practical problems of assuring effective application of such policies, criticism of these groups does not justify neglect of the most important stabilization instruments available.

This criticism of the Council can be generalized by the statement that, on the whole, the Council has failed to come to grips with the main job it was created to solve. With its emphasis upon the total economic program of the government and its neglect of monetary and fiscal policy, the Council has been ineffective in promoting either specific stabilization proposals or guiding other groups towards independent action likely to increase stability in the economy. Even more important is the failure of the Council to consider the fundamental changes in the structure of the economy which may be necessary if stabilization is to be achieved in our time within a free market system. There seems to be an underlying assumption that the present system of concentrated economic control of industry and, more recently, labor is inevitable. This may be so, but in view of the substantial opposition to such a view, the Council should at least make the public more nearly aware of its thinking on this matter. It is also necessary to greatly improve the governmental machinery to make effective action possible.

When the Council has tried to focus on the main problem it has emphasized wage-price-profit relationships and stressed the need for better price policy. What a proper wage-price-profit policy is, the Council has failed to say except in the most general terms. However, assuming that the proper relation is discovered, the Council has failed to show how the business community can be expected to either approach this ideal or, if it is approached by accident, maintain such relationships. The Council has relied upon a policy of exhortation of responsible business

and labor leaders to be reasonable and to follow a wise price policy. Frequent generalizations are made about the necessity for lower prices and maintenance of adequate purchasing power in the lower income levels. It has been suggested that the logic of the Council's position leads to the re-creation of the NRA.

It is the conclusion of the speaker that the failure to establish standards for wage-price-profit relationships that can be translated into specific guides for action at the level of the individual firm or labor union, is sufficient evidence that dependence upon this route to stabilization is doomed to failure in the immediate future. In this event, two courses of action in this area are open. First, the imposition of direct price and wage controls to assure the results desired and, second, the return to a market organization that reduces the importance of administered prices. The Council has failed to face this issue directly.

The most serious example of the failure of the Council to consider the problem of the institutional implications of alternative stabilization devices is reflected in its tendency to suggest specific or selective controls for undesirable conditions. In any specific situation, no one can be certain whether the use of direct price and wage controls would or would not be a wise policy but it is contended that this is a dangerous approach to the problem and the costs and possible dangers of perpetuating and extending direct controls must be presented and weighed before such a course is advocated. Of course, there is danger of possible abuse of fiscal or monetary policy or other positive government policies, but the risks of serious hurt to the market economy are less under such an approach than any other available. This distinction does not ever seem to enter into either the reports of the President or the Council.

The Council seems to believe that in view of our limited knowledge we must wait until a depression or inflation has become well established and then start to get legislation designed to meet the particular crisis of the moment. This seems to be a counsel of despair. If such a course is followed, no action could be taken until after long delays had given a chance for cumulative forces to begin to work and the hope for substantial lessening of all but major fluctuations must be given up entirely.

The principle that stabilization measures must be flexible requires public acceptance of the idea that there is no inconsistency in reversal of action on the part of government. Until this point is made clear the possibility of development and public acceptance of reasonably effective stabilization devices will be slight. The position of the Council has probably retarded rather than advanced the public acceptance of this view.

Another point requires much more thought and attention than it has

yet received by either the Council or the profession. In spite of some good staff work and the frequent meetings of the Council with the Cabinet and other government groups, the extent of co-ordination of economic policy within the executive branch and between the executive and legislative branches of the federal government is far short of what is required. Until this fault is corrected the chance that the Council can become effective in promotion of stabilization devices or in its specific recommendations regarding the requirements of governmental action at any particular time is poor. Although this problem is one of much wider scope than the problem of stabilization, success in administering the Employment Act is dependent upon finding a solution to it. The Act itself can be considered a step in the right direction. However, the decision to give the Council of Economic Advisers three members rather than one made certain that it would be divided on many issues to the detriment of its influence. The actual differences among the members of the Council have been well known and have undoubtedly hurt it within the executive branch and in the public eye. However, the decision to place the Council in the President's office was a wise one. Only as the Council can use the authority of the President can it hope to get either the notice it requires or can the development of balanced plans and programs be hoped for. The Council has made some progress in this direction but much more is required.

Much has been made of the issue whether Council members should appear before Congressional committees in support of the President's program. On this issue there has been misunderstanding on both sides and the relations between the Council and Congress have suffered accordingly. The development, in the first days of the Act, of the practice of the Joint Committee on the Economic Report publishing two reports representing majority and minority views did much to discourage co-operation and gave support to the feeling that little would be gained and much lost by Council members' appearance before even this Committee. On the other hand, the inclusion of all types of economic programs in the President's *Economic Report* invited such reaction on the part of the Joint Committee. The recent hearings conducted by the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report have raised the level of the debate in this Committee and give hope for the future. Certainly the continued gulf between the Council and Joint Committee cannot continue if positive action is to be taken. Of particular regret is the refusal of the Council to answer the questionnaire of the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the ground that other work of the Council did not leave time for this purpose.

As our chairman (Dr. Goldenweiser) stated in his Presidential Address in January, 1947, to achieve the sort of co-ordinated government program necessary at the present time "better organization of the government, more direct and effective ways of translating programs into action must be devised and instituted." I agree also with his general conclusion that until greater party discipline and an approach to a cabinet form of government in the executive branch are achieved, there is little hope that the necessary improvement in the operation of our governmental machinery can be realized. Without responsible party leadership and without opportunity for the voter to choose between candidates with a knowledge that the party label is a significant pledge to adhere to a specific economic policy, there is little hope that the co-ordination of executive and legislative branches of government necessary to achieve real economic stability can be realized.

With responsible party leadership there is chance that professional economists could make a major contribution to the stabilization of our economy. This assumes that the party in power is willing to use the knowledge available. If the knowledge is not used, at least the responsibility for failure is made clear. Under the present system, or lack of system, in government, responsibility for failure is never clear.

In conclusion, it can be said that the record under the terms of the Employment Act of 1946 indicates two things: first, that the economy is much more adaptable and still has more vitality than many economists and others believed at the end of World War II; second, that the job of achieving an affirmative legislative action to strengthen the power of government to act rapidly to offset inflation is much more difficult than had been generally believed. There is danger that in spite of the toughness that the economy of the United States has shown in recent years we will enter another period of inflation or deflation without adequate instruments to check the disturbance until it becomes serious. In this event the chances of maintaining a market system are reduced and the obstacles to the preservation of a democratic government are greatly increased.

There is immediate need for governmental action to strengthen the kit of tools available to offset or contain economic fluctuations. These must be acceptable to the majority of the people and be designed to preserve the basic values of the people. This need has been studied by the Council but largely neglected or discounted in their public statements. It can continue to do so only at the risk of serious repercussions of both an economic and political nature. Granting our limited knowledge, instruments should be designed to achieve the maximum flexibility and the public made to understand that reversal of direction

of certain programs is consistent with sound policy. If a market system is to be preserved, indirect controls should be used wherever possible. In any event, the choice between direct and indirect controls should be made clear and the price paid in each case discussed.

The problem of gaining acceptance of effective stabilization programs is as great within the government as between the government and the private sector of the economy. The solution of this aspect of the problem is not easy. Greater understanding and public education have their role to play. However, the greatest need is for responsible, positive, governmental leadership. This will not happen by accident. Radical reform of governmental concepts traditional in the United States is required. The historical bias is against positive government. The creation of responsible parties and a responsible co-ordinated leadership on the part of the executive as head of his party is essential. Only in this manner can the difficult problems of co-ordination at the executive level and executive-legislative level be resolved.

Specific suggestions to improve the Employment Act include the following: (1) it is urged that the Employment Act be amended to establish a single-headed stabilization staff to the President; and (2) it is urged that the President submit to Congress plans suggesting the revision and extension of governmental powers necessary to meet changing economic conditions rapidly in the future. For example, some flexibility in tax rates or exemption should be considered. The second suggestion would require a major report in the near future and subsequent reports as necessary but does not require any change in the Act.

It is also recommended that the annual economic report of the President be restricted in scope to focus on the immediate issues of stabilization—the past record and current status. No predictions of future trends should be made, although the way in which government proposed to act in the event of major changes in income or employment might be developed so greater understanding could be achieved. Programs of social reform and international affairs should be excluded from this message except as they directly affect stabilization.

In addition, attention must be directed at once to the question of institutional reforms necessary to strengthen the market system. The current hearings of the Joint Committee on the Economic Report are a step in the right direction. This is a matter of vital importance to future stabilization policy but cannot become the responsibility of the Council of Economic Advisers or its successor if it is to do its primary job. It is suggested, therefore, that the President establish a National Economic Commission to review this problem and prepare a report for submission to Congress at an early date. The Council or its successor

should be a member of any such commission and continually stress the implications of institutional structure upon stability of employment, income, and prices. Other members should be drawn from the Cabinet, the Congress, and the public at large. There is no more important issue facing the country today. Failure to discuss the issue as a whole will result in continued compromises and may permit irrevocable steps away from a market system to be taken without real public debate.

The traditional pragmatism of the American people and the failure of such attempts as the TNEC in the past can be cited to suggest the difficulty of achieving results. Further difficulties can be foreseen in putting the recommendations of the Commission into effect. Vested interests have multiplied under the present system. Radical changes in business organization may be required. Equally radical changes in government organization and powers may be called for. Resistance to change would be great and could be overcome only if a strong President was given full support by his party.

The importance of overcoming the barriers to formulation of a program of institutional reform is emphasized when it is realized that only as such an agreement on institutional goals is worked out can adequate stabilization devices be suggested. Without such agreement the stabilization program of the Administration may prove to be unacceptable as a basis for positive legislation. The reason why the Employment Act of 1946 was written in such vague language is that this issue could not be resolved. Vague action or no action will continue until a decision is reached.

In the meantime, some positive steps should be taken immediately. On the basis of existing attitudes and past experience it is suggested that the Council or its successor concentrate on the formulation of stabilization plans using the existing money, credit, and tax powers of government. If Congress can be persuaded to increase the flexibility with which these powers can be used, much will have been accomplished. Although there may be objection that this would increase government powers unduly, such objections must be overridden in view of the fact that they are the most neutral powers available, and if such powers are not strengthened, nothing new can be done to temper future fluctuations without waiting for new legislation after conditions have already become serious. This is too dangerous a policy to follow in this age of constant crisis. It is better to risk some further extension of government powers than the destruction of the political and economic system as we know it today.

One may conclude that the three-year record of the Council of Economic Advisers is about what could be expected in view of the failure

of most individuals or the Administration to face the basic issues. The translation of current economic thinking into positive economic policy is a difficult process at best and without the compelling pressure of events may be impossible. It is upon the contradiction of this last assertion that hope for positive action to prevent the next major depression rests.

ECONOMIC REQUISITES FOR ECONOMIC STABILITY

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As I understand it, my task is to try to isolate the economic requisites for economic stability, as distinct from any evaluation of the Employment Act of 1946 per se and from any attempt to prescribe economic legislation or administrative policy. Put in other words, I conceive that essentially my job is to set up in its bare fundamentals the problem confronting economic stabilization policy makers, in the hope that such a restatement of the problem may be suggestive in rethinking policy problems. In this process, I shall be primarily engaged in fitting together the present state of knowledge, as I see it, on this problem, with an orientation throughout toward policy.

I shall proceed by defining economic stability, setting up the basic conditions necessary for the achievement of economic stability, examining the conditions which must prevail in the private economy for these fundamental stability conditions to be achieved, and examining the conditions which must prevail for government action to provide the fundamental stability conditions. Finally, I should like to venture a few tentative observations on the implications of this analysis of the problem for policy making.

I

This subject implies that we want economic stability. "Stability" is a good word, as "rigidity" is a bad one. What do we really want when we say economic stability?

Probably the commonest definition is that economic stability means stable, high-level employment and a stable price level. But this common statement of a double objective is unsatisfactory in at least four respects: in its looseness of terms (e.g., what price level?), its failure to include a real output objective, its failure to include the constraints within which the stated goals are to be achieved, and, perhaps most important, its failure to recognize specifically the crucial role of growth in employment and output in the whole problem.¹ Surely what we want

¹ The language of the Employment Act of 1946, that the objective is "to promote maximum employment production, and purchasing power," is very loose or inflationary, perhaps both. "Maximum" employment and production are presumably to be construed within some framework of social policy as to the age groups to be included in the labor force, hours of work and intensity of work while on the job, and as to the use of natural resources. "Maximum" purchasing power in the money sense, taken literally, would imply drastic (infinite) price inflation; in the real sense it is little more than a restatement of the production objective. If the latter is the correct interpretation, the directive includes no stricture against inflation.

is not stability in the static sense of constancy of employment and output, but rather stability in the dynamic sense of growth in output and employment at some optimal rates, coupled (probably) with static stability of some index of prices of goods and services to consumers. Moreover, given present American thinking, a major constraint must be recognized; namely, that stability must be operative with something like the present degree of freedom of economic behavior for the individual, the group, and the firm.

Stated more precisely, I suggest that economic stability, in the sense of a fundamental social desideratum, can be most meaningfully defined by the two following major characteristics (recognizing the freedom of economic behavior constraint):

1. *Growth of national real output at an optimum rate*² dependent primarily upon the growth in the labor force (given the prevailing social standards as to working age-spans, hours, and intensity of labor) and the increase in productivity (which is in turn dependent on technological advance, development of skills, capital investment,³ and other factors). I shall term maintenance of this growth rate "dynamic stability."⁴ The particular concept of dynamic stability used here thus implies the maximum growth rate consistent with the labor force and productivity factors stated above and with the availability of other resources, recognizing also social and private restrictions on the rate of other resource use (e.g., controls over the exhaustion of oil reserves). Several writers have suggested that this growth rate for total output is about 3 per cent per annum, but the stability rate need not be constant from year to year. Given this total real output objective, "full" or "high-level" employment need not be stated as a separate goal since the output objective specifically implies such employment; employment is taken as a (declining) function of the level of output.

2. *Constancy (static stability) of some index of prices; more fundamentally, a price level or national money income basis for business and consumer expectations that will permit orderly business and individual planning* on the basis of reasonable static or dynamic stability of total money income and demand for goods and services. "Consumer price level" constancy is often cited as the simplest expectational

² Within some tolerable range of variation—say ± 5 per cent of total output for any year.

³ I am aware that the inclusion of capital investment here without a statement of its own determinants or "optimal" rate may seem questionable. This issue, which may be less important for the rate of increase in productivity than it sometimes seems, is considered more fully in the next section.

⁴ This usage more broadly might consider as dynamically stable any system which, when disturbed, tends to return to some growth rate. The approach in the text is to define stability as maintenance of the optimum growth rate, and then to examine, in later sections, the question whether there are forces which will tend to restore real output growth to this time path if it leaves the path.

basis for such economic planning. But the important thing is that businessmen, resource owners, and consumers know roughly what to expect about prices and money income in the aggregate as a framework for their individual plans. Otherwise the system has no basis for orderly planning, expectations become highly unstable, and the system's susceptibility to cumulative price and output instability is greatly increased. In principle, planning could be adjusted to any expected increase or decrease in average prices or total money income. As a practical matter, probably some very moderate rate of annual price level change is the most a system of our present type can adjust to without serious disruption, short of drastic changes in institutional contracting arrangements. This second major characteristic of economic stability, given the freedom of economic behavior constraint, thus also becomes a probably necessary condition for the system's internal achievement of the first stability characteristic.

II

If this definition of economic stability is accepted as the objective we wish to achieve, then the economic requisites for achieving economic stability may be summed up in two stability conditions:⁵

1. Total money income (roughly, money gross national product) must grow at approximately the optimum rate of growth in real national output (if a stable commodity price level is wanted), or at a rate which differs from the optimal real output growth rate by a factor established by the divergence of some index of prices from constancy. This is the condition of dynamic stability of total money income. It follows directly by combining the output growth and monetary stability criteria of the preceding section.

2. Owners of productive resources (including labor) must be willing to offer them for use in exchange for incomes that add up to the total money income specified in "1," or to less. If, for example, 200 billion dollars is the specified total money income (omitting the government) and members of the labor force will not work for less than 150 billions, contractual commitments for rents, interest, etc., total 40 billions, and employers will not hire the total labor force if profits are less than 30 billions, then either unemployment or inflation will result. Only if these total claims add to 200 billion dollars or less will economic stability be obtainable. This is the income claims condition; it might be loosely called the full employment condition. Without it, "1" is not a sufficient condition to assure economic stability.⁶

⁵ Alternative sets of stability conditions, with more variables considered separately, could be stated. This pair is chosen here because of its usefulness as a focus for policy analysis.

⁶ These conditions imply certain welfare propositions. In essence, these are that, other

III

Under what circumstances will our economy endogenously fulfill these two basic requisites of economic stability? If these circumstances are not present, is there clear evidence available to governmental policy makers as to where and by how much the system will fail to fulfill the stability conditions? Consider the two conditions separately.

1. *Dynamic Stability in Total Money Income.* First, what are the conditions under which a private, American type economy would generate the optimal growth in total money income (i.e., dynamic monetary stability), assuming for the moment that the income claims condition is met and that the monetary system is passive and highly elastic? A series of economists (Samuelson, Harrod, Domar, Schelling, and Alexander) have recently investigated the conditions under which a cumulative accelerator-multiplier process can produce a steady growth in money income.⁷ Most plausible constant values of the accelerator and the marginal propensity to consume yield unstable time patterns of total money income. While some not implausible values would yield steady growth, they would lead to very high growth rates, far beyond any plausible rate of increase in total real output. If the values of the accelerator and the marginal propensity to consume are considered variables rather than constants, a more moderate steady growth rate might be achieved, but this would require the unlikely circumstance that the propensity to consume approach unity as income rises, that prices rise moderately but no faster, and that the value of the accelerator satisfy certain special conditions with relation to income and investment periods. Introduction of the destabilizing tendencies of the American monetary system would lessen this chance even further. In summary, the likelihood seems extremely small that the private system itself will generate and long maintain any moderate, steady growth in total money income. The likelihood is even less that such a rate would happen to coincide with the optimal total money income growth rate indicated above.

Consideration of the problem with other ("non-Keynesian") ana-

things being equal, (1) welfare will be maximized by "maximum" real output growth (as contained in the preceding text), and that (2) the income claims condition will not necessitate an income distribution which will reduce the welfare obtained under "1" below that obtainable with another income distribution and a lower total real output. The stability conditions thus do not imply that any particular income distribution (by size or functional group) is better than another, but only that the sum of all effective claims must be consistent with optimum real output. Put in other words, if total income claims are too large, the income claims condition does not prescribe which income claimant should give way but only that some one (or ones) must for economic stability to be obtained.

⁷ Professor Alexander has provided the most complete statement of the conditions of stable growth. "The Accelerator as a Generator of Steady Growth," *Quarterly Journal of Economics*, May, 1949.

lytical techniques yields the same conclusion—that in the absence of positive government monetary or fiscal actions, or at least governmental bases for the formation of stabilizing expectations, slow steady growth in total money income is very unlikely. Governmental action seems to be essential for the maintenance of either static or dynamic stability in total money income; there are no strong automatic forces tending to produce this result.

2. *Total Income Claims Consistent with Dynamic Money Income Stability.* While there is no "automatic" force acting to bring about the optimal money income growth suggested above, with completely free markets there would be an "automatic" tendency toward the establishment of wages and other prices consistent with optimal real output and employment at the given money income level. This force is the traditional tendency of flexible (free) prices to move to a point where the market is cleared.

Two questions may be asked here. First, is price flexibility a sufficient condition to assure the optimal growth of real output and employment, and second, is it a necessary condition? Under certain static conditions the answer to the first question is yes; the dependence of Keynesian underemployment equilibrium on price rigidity somewhere in the system, emphasized by Modigliani and others, is now generally recognized. On the other hand, the recent work of Patinkin and Schelling has formalized the highly restrictive set of conditions under which even perfect price flexibility would lead to continuous full employment in the absence of governmental monetary-fiscal intervention. Because of the probably destabilizing behavior of price expectations and of the monetary system over at least some range once a deflation is inaugurated, preservation (as distinct from ultimate restoration) of full resource utilization is highly dubious. On the other hand, given some force maintaining total money income at some constant or dynamically stable level, perfect price flexibility appears to be a sufficient condition for the maintenance of full resource utilization.

Second, given stability of total money income, is price flexibility a necessary condition for the optimal real output and employment growth? Put in other words, given stability of total money income, are prevalent, inflexible, administered prices consistent with the optimal growth in real income? I think we must admit that we do not have a clear-cut theoretical answer to this question. It appears highly probable that fairly extensive price inflexibility is consistent with optimal output growth, given dynamic monetary stability, even though such individual price inflexibility has clear-cut resource malallocation effects. Perfect price flexibility is probably not a necessary condition of optimal real output growth.

But one type of administered pricing is clearly not consistent with full resource utilization, given total income stability. This is pricing where the price-setters attempt to obtain through higher prices a larger share of the national real income than they would obtain under free market pricing. This has received most attention lately as the "wage-price" problem, where union wage demands may obviously be inconsistent with full employment at any given commodity price level; this, together with the government-sponsored farm price pattern, is probably the practical crux of the problem. Yet such prices are common and apparently on the increase, with a growing tendency for resource owners to work through government sponsorship for increased income shares.

I suggest, thus, that the requisite for achieving the income claims stability condition is not extensive individual price flexibility but rather the absence of administered prices which are highly flexible upward as a device for increasing the income shares of the sellers concerned. Put loosely, given the real-world political-economic alignments of the recent past, it seems probable that practically the income claims condition amounts to greater stabilization of money wages and farm prices relative to total money income. The crux of the problem is the distribution of income, as implied by the original statement of the condition in "II"—it is the willingness of resources owners to offer them for use in exchange for incomes that add up to not more than the optimal total money income (continuing to exclude the government). I see in our present arrangements no "automatic" forces to assure that such claims on income will be consistent with economic stability.

IV

This brief survey suggests that we cannot count on the private economy to fulfill the two basic stability conditions, and that government action of some sort will be required if the conditions are to be met. Let me turn now to the sequential question of what are the requisites if supplementary government policy is to yield the two stability conditions, still retaining the constraint that roughly the present degree of economic freedom must be maintained. Again it is convenient to consider the monetary stability and income claims conditions separately.

1. *Dynamic Stability of Total Money Income.* Governmental control over the level of total money income is essentially a monetary-fiscal policy problem. The requisite conditions in order that government monetary-fiscal policy be able to produce dynamic stability of total money income may be briefly summarized as follows. The requisites are

general, regardless of exactly what growth rate is chosen as the optimum.

a) *Wisdom in Analysis and Prediction.* To achieve dynamic monetary stability the government must be able to predict when there will be a need for stabilizing measures or to analyze current developments promptly enough to provide a basis for successful policy formation.

b) *Wisdom in Policy Formation.* Given any predicted need for stabilizing policy measures, the government must know what actions to take and how much action is necessary to achieve monetary stability.

c) *Adequacy of Monetary-Fiscal Instruments.* There must exist monetary fiscal instruments (action patterns) which are capable of controlling the level of total money income within whatever limits of tolerance are set (say ± 5 per cent). These instruments must be capable of overcoming all pressures toward instability in total money income—the bunching of demand for durables, the impact of technological change, international political and economic developments, the pressure of cumulative price or output expectations, etc. They must also operate with a sufficiently small time lag between the decision to take action and the effect on total money income to hold money income within the tolerance range.

d) *Government Organization for Action.* Given the satisfaction of the preceding three conditions, there must still be formal or informal organizational arrangements within the government to assure that the appropriate action is taken at the appropriate time. This condition of course implies arrangements between Congress and the executive branch as to delegation of authority, as well as within the executive branch.

Evaluation of the chances on fulfillment of these four requisites of successful government monetary-fiscal policy is not my task. Many of the fundamental problems in achieving the requisites are suggested by the listing.*

2. *Total Income Claims Consistent with Dynamic Money Income Stability.* If we assume that money income stability exists, three alternative conditions may be stated for government assurance that aggregate income claims will be consistent with full resource utilization. Any one of the three conditions would be sufficient.

a) Ability of the government to eliminate appreciable monopoly powers from all markets, and to eliminate income-raiding actions (such as farm parity provisions) from its own policies. Free market pricing was indicated above as a sufficient condition for maintenance of income

*I have analyzed this problem in more detail in "Monetary-Fiscal Policy Reconsidered," *Journal of Political Economy*, October, 1949.

claims consistent with full resource use, given monetary stability. Desirable as it may be, there is little current evidence that major progress will be made on this score. On the contrary, the channeling of income-raiding practices through government sponsorship appears to be increasingly common.

b) Ability of the government to eliminate income-raiding price setting through direct (i.e., non-monetary-fiscal) controls. This possibility is eliminated here by our original constraint that the stability be consistent with maintenance of roughly the present degree of freedom in economic behavior.

c) Ability of the government to induce income claimants to hold their claims to levels consistent with monetary stability. I have suggested above that the crucial problem here is that the squabble over money and real income shares has been transferred increasingly from the market place to the political arena. Given monetary stability, even many individual firm or individual union monopolies of the usual textbook type are unlikely to cause too much trouble for the maintenance of economic stability; this is so because the price-raising policies of any one monopolist will be restricted sharply by the fear of going too far and because the individual monopolist will not calculate his income demands on the belief that he can force the government to adopt monetary-fiscal policies to guarantee his sales or employment if he prices himself out of the market. The economic pressure group, be it farm, labor, or business, on the other hand, may well calculate its income demands on the assumption of driving the government to income-expanding monetary-fiscal policies in case higher wages or other prices lead to unemployment or declining business activity. The crux of the problem here, I argue, is group behavior. It is not an economic problem in the narrow sense, but rather one of political economy in the broadest sense.

Let us recognize our basic belief in individual freedom (including the freedom of the individual to associate with others in influencing government policy) and the established status of many politico-economic income-oriented groups in modern society. In this setting, I suggest that the real test can be meaningfully stated only in terms of the government's ability to furnish a "truce" basis on which income claims can be voluntarily adjudicated with obvious lack of discrimination or forced back into the impersonal market for settlement. In a free society, settlement of so central an issue as relative income shares can only be settled on the basis of a free consensus as to a reasonable solution or a reasonable procedure for reaching a solution. On an emotionally-charged issue, the latter approach is likely to be the more fruitful.

So seen, the close interrelationship between government action on

the monetary stability and income claims conditions bears emphasis. No truce on the income distribution issue can avoid being closely bound up with the government's policy on monetary stability, since it is this governmental policy that sets the upper limit to the aggregate of money income shares and which in effect either allows inflation or imposes unemployment as the penalty for "too high" wages and prices when claims exceed total money income at the monetary stability level.

V

I have so far stuck fairly closely to the job of setting up in skeletal form the economic problem facing policy makers in the economic stabilization area. In conclusion may I make four tentative suggestions as to some implications for policy that seem to me to be indicated when the stability problem is so reduced to fundamentals.

First, continuation of the past governmental *ad hoc* approach to economic stabilization, with no real, firmly stated policy guides on monetary or income distribution questions, seems calculated to provide a minimum chance of achieving the two basic stability conditions. On the monetary stability score, I have suggested the present substantial uncertainty as to the attainability of all four government requisites (economic prediction, correct policy prescription, adequacy of monetary-fiscal instruments, and governmental organization for effective action); this suggests the low probability that *ad hoc* monetary-fiscal policy will succeed much of the time until we are better prepared for action on all four fronts. On the income claims score, I can hardly believe that trying to fool most of the people most of the time by camouflaging excessive income claims with a monetary veil of "just a little inflation" whenever trouble arises is a sound or even workable long-run solution. An open, honest policy that can stand on its own feet is surely more in keeping with the tradition of voluntary, informed consensus in a free society; as such, it would provide a firmer base for a real income claims truce.

Second, the uncertainties as to governmental ability to perform satisfactorily on the four monetary stability requisites noted just above suggest to me the advantages of more extensive use of built-in-flexibility monetary and fiscal devices. Such devices, though short of a complete stabilization solution, at least guarantee relatively prompt, right-directional budgetary pressures toward income stability. Neither of these characteristics has been conspicuously present in past *ad hoc* monetary-fiscal policy making.

Third, the greatest hope on the income claims problem seems to me to lie in providing a firm monetary-fiscal framework for a truce through a Congressionally enacted and popularly accepted policy of stable total

money income growth or price level stabilization. Exactly which monetary stabilization policy should be adopted needs to be considered primarily on the basis of which could be most easily and thoroughly "sold" to labor, farmers, and businessmen as a stabilizer within which their income claims must remain; but it should be clear that if the stabilizer value is to be realized the policy cannot be one that involves *ad hoc* replanning of the level of optimum total income (or prices) every time income gets seriously off the originally planned path. Such monetary stabilization might usefully be accompanied by a governmentally sponsored annual wage increase formula, tied primarily to productivity increases and individual labor market conditions. Such a wage formula is intriguing, but the problems of acceptance and detailed implementation seem to me formidable in a free society. Professor Lerner's ingenious scheme to implement such a wage formula by disallowing for employer tax purposes all wage payments above the formula is suggestive and avoids the obvious pitfalls of direct detailed government wage-setting which seems to be the logical outcome of most other wage formula approaches that have any teeth.

Fourth, some combination of greatly increased built-in budget flexibility on both income and expenditures, plus a Congressional resolution that the government's monetary policy shall be to maintain some price level between moderate limits, or to maintain national income within moderate limits around some simple growth rate, could go far toward improving short-run stabilization policy and could provide a promising basis for a fundamental, long-run solution of the stabilization problem—all without drastic change from present practices and directly in the spirit of the policy enunciated in the Employment Act of 1946.

POLITICAL AND ADMINISTRATIVE REQUISITES FOR ACHIEVING ECONOMIC STABILITY

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I. Introduction

Whether the instability which has marked our economy will be reduced to such an extent that economic good health will prevail without interruption depends on at least two general sets of factors. It depends first on the adequacy of the economist's diagnosis and proposals for treatment. It depends also on whether and how the treatment is applied by the people who formulate and administer public policy. What are the requisites for securing the kinds of political and administrative action which will give effect to the economist's proposals for achieving stability? How and to what extent, if any, has the Employment Act of 1946 increased the degree to which these requisites exist and can be relied on?

Economists have important responsibilities in the several functions of the policy making and administrative process. First is the analytical function of forecasting the effects which alternative possible kinds of governmental action would have under the economic conditions that are expected to prevail. This function is peculiarly within the economist's field of specialization. Second, conflicting interests of different regional, income, industrial, and occupational groups, and competing public values—equality, freedom of action and movement, rate of economic progress, stability, and so on—must be weighed and choices and compromises made in determining what pattern of objectives is to be promoted. The economist can throw a great deal of light on these choices, but they are the essence of politics in its highest sense and should be made by responsible political representatives. Third, these political decisions must be implemented by specific legislative and administrative provisions. This is a kind of engineering problem in the solution of which economists join with administrators and lawyers. Since legislation often has unintended effects on various groups, the engineering function also requires the politicians to make a variety of minor political decisions in the implementation of the major decision. Moreover, the politicians always make the final decisions.

To fulfill his functions of assisting in the formation and implementation of policy, the economist must give weight to political and administrative aspects—at least those of a long-run character—for otherwise his policy recommendations can have only partial and conditional sig-

nificance. Governmental action is not an abstraction or idealization but is what in fact emerges from the political and administrative process. Public response to such action takes political as well as economic forms, and both must be taken into account in forecasting the effects of governmental action.

The political and administrative requisites for achieving economic stability depend on the economic requisites. If a stable economy can be achieved automatically without political or administrative action, there is obviously no problem in these fields. If stabilization can be achieved by the adoption of a program which works automatically after adoption, the political and administrative problems may be considerable but are limited. If stabilization requires frequent and sudden changes in governmental action, political and administrative problems are far greater than if that is not the case. If monetary and fiscal action is sufficient, the political and administrative problems are much less difficult than if direct controls must be exercised in various segments of the economy.

I shall assume here that to achieve economic stability it is necessary for government to take action with at least monetary and fiscal instruments to offset fluctuations in private consumption and investment demand, and that the more adequate in size the offsetting action is and the faster it is brought to bear, the more nearly is stability likely to be achieved. There are other threats to stability than those that result from fluctuations in demand. The combination of downward rigidity and upward flexibility, even "pushability," of product and factor prices may have a "ratchet" effect leading to higher and higher prices, a result to which compensatory fiscal and monetary action may contribute. To simplify my task I shall largely ignore this very fundamental problem, which itself presents crucial and largely unsolved political and administrative difficulties.

II. Major Political and Administrative Requisites

Flexibility of Governmental Action. Flexibility of governmental action—ability to make quick changes in direction and magnitude—is perhaps the most obvious political and administrative requisite for achieving economic stability. The obstacles to flexible compensatory action are impressive.

First, legislative action inevitably proceeds slowly except in the most critical of emergencies.

Second, Congress has been traditionally unwilling to delegate powers to decrease or increase taxes or expenditures to the President or other administrative agency. This unwillingness may in time be overcome, but the opposition to such delegation is deeply rooted and powerful.

Third, the apparent irreversibility of some kinds of action discourages their use. This is true of taxes, expenditures, and monetary action. Take taxes, for example. It has not proved difficult for the President to secure desired reductions in taxes. But the idea that an appropriate time to increase taxes is when rising prices are shrinking the family dollar has not proved salable to Congress or the public. Tax reduction is thus a precious antideflationary resource to be husbanded until there can be no question that it is needed.

Fourth, there are administrative delays in taking action. In part, these have mechanical causes. Time is required to put into effect new rates of withholding tax, or to get under way a new expenditure program, or to cut off an expenditure program in mid-course with the least waste. In part, administrative delays are inherent in the decision-making process and may stem from bureaucratic inertia, lack of a clear Congressional policy, the risks of political criticism and reprisal, un-
sureness about the effects of proposed action with respect to direction, magnitude, or time lags, or uncertainty about the future of business conditions.

Integration of Policy. A second requisite to the achievement of economic stability is the co-ordination and integration of the multitude of governmental operations so as to promote the stabilization goal. Virtually every policy of government has some bearing on the volume of total demand, production, or employment, and accordingly has a bearing on economic stability. The effects of any one program on stability may not loom sufficiently large to be given adequate consideration in the political struggles over the character, size, and timing of these programs. When there are many programs of this kind, an effective stabilization program may become impossible. In the case of some kinds of governmental action, the imperative character of the objective may make it necessary to exclude effects on stability from consideration. This is all the more reason for integrating with the policy of stabilization all programs where such integration is possible.

Such policy integration is immensely difficult. In part, the problem is one in mechanics and its difficulty is a result of the great number and variety of federal activities.

In part, the problem arises because there are many objectives of governmental policy besides economic stability. Even the objective of a stable economy is something of a catch-all that includes several specific and sometimes competing objectives. A stable economy will not satisfy us unless it has more than mere stability; we want also a high level of employment, ready adaptation of the economy to new tastes and conditions, economic progress, and a large measure of personal freedom. There are many other legitimate public purposes besides a

stable, growing economy; indeed, stabilization is a relative newcomer among the goals of governmental policy. Where goals compete, priority must be determined, preferably by intent instead of through the waste motion of mutually offsetting action.

In part—and this is the most serious factor—the problem of integrating public policies toward economic stability is made difficult by the relation of private group interests to governmental policy. Under pressure from numerous organized groups, governmental programs tend to run off in all directions. For example, each dollar of expenditures or taxes reflects an uneasy political equilibrium between advocates and opponents of some governmental program. This political equilibrium might be upset to some group's disadvantage if the program were obliged to contribute to economic stability. The total effect of many such policies may outweigh other activities directed toward achieving stability. These conflicting policies dictated by powerful group interests may prove to be an insuperable obstacle to achieving a stable economy.

The machinery of the federal government, out of which should flow an integrated program in the public interest, is not well adapted to achieving co-ordination of policy.

In the executive branch, the integration of policy would superficially seem to be an easy matter to accomplish because the President is the only elected official and all of the officials and employees of the executive branch are subordinate to him. Theoretically, each and all of these can be kept in line with the President's policy by the fear of discharge. Actually, the matter is not so easy. Cabinet members and agency heads have political followings of their own. They are appointed with the advice and consent of the Senate. Some have fixed terms. They have direct mandates for action from the Congress and may be more afraid of offending the Congress than the President. Finally, to formulate a co-ordinated set of policies, even for the President, is a difficult task, in view of the strong political forces pulling him in many directions at once.

In recent decades several instruments of co-ordination have been developed. The Bureau of the Budget is a substantial integrating force, particularly with regard to expenditure policy. The strength of the Bureau in this respect lies in the fact that it is in the Office of the President and really subject to his direction. A weakness is that the Director of the Budget usually has no political influence of his own to assist him when he comes into conflict with important members of both the executive and legislative branches. Another instrument of co-ordination was achieved in the enlargement of the Executive Office of the President to include a group of personal assistants to the President to help him in formulating and co-ordinating policy.

In the Congress the situation may be said almost to encourage the development of conflicting policies. The Senate and the House may be controlled by different parties; even when the same party is in power they guard their prerogatives and independence jealously. Within each house the traditions and procedures are against integration. Party responsibility tends to be weak. Every state and Congressional district is a virtually separate political entity so far as the discipline of members is concerned. Since both of the major parties are aggregates of dissimilar elements, blocs are likely to be formed on specific issues of policy with little regard to party lines. The committee system places different policies in the hands of different committees, which are very powerful in sponsoring legislation and even more powerful in blocking legislation which they oppose. Even the appropriations process is decentralized among largely independent subcommittees. Appropriation bills for different agencies are separate, which makes difficult an overall view of the budget. This fragmentation of Congress prevents adequate emphasis on economic stability as an objective of legislation; other considerations take precedence.

Finally, the difficulties of obtaining unity of action between the President and Congress require no elaboration here. They are traditional and inherent in the structure of the federal government.

Confidence in Economists and Economics. A third requisite of economic stabilization—and I consider it a political and administrative requisite—is that policy makers and administrators shall be able to have and shall have confidence in what economists tell them. Otherwise, the policy makers must make their own economic judgments, and not being well equipped to do this, they are not likely to adopt policies leading to a stable economy. Economists may deserve confidence which they do not receive, but they are not likely to receive it for long if they do not deserve it. The policy maker has very good reason to complain about what he gets from the economist as a basis for stabilization policy. Forecasting of business conditions is one basis for complaint. While economists can, with a good deal of certainty, forecast that there are going to be inflations and depressions in the future, their record in forecasting particular inflations and depressions has not been good. The economist may avoid this difficulty by refraining from making forecasts—although someone must in effect make them—but he cannot avoid saying what the economic effects of various possible government actions are likely to be, and if what he says is to encourage confidence, it must prove to be reliable. The policy maker has good reasons not to have confidence in economists, since different economists tell him different things and force him to be his own economist. Clearly a requisite for political and administrative action toward economic stabili-

zation is a more adequate economic science and greater unanimity among economists about their science. It is gratifying that in recent years there have come to be larger areas of agreement among economists on the effects of governmental fiscal action on the stability of the economy.

Economic Sophistication of Congress and Public. A fourth requisite of economic stabilization, at least in a democracy, is a high degree of economic sophistication on the part of Congress and the public—assuming that federal administrators will usually be guided by professional economic advice. This requisite underlies all that has gone before. Economists face a dilemma at this point. It is virtually impossible to teach the adult public enough modern economics for the little knowledge they get not to be a dangerous thing. Yet the public does the ultimate deciding, and from its noneconomist ranks come most of the policy makers. The intelligence of policies cannot rise much above the level of the economic knowledge of the people who make them. It would be pleasant if the economist were in the position of a doctor or a physical scientist, or even a lawyer, who is blindly relied on by the layman. But the facts and concepts of economics are too well known to the public for the economist to occupy such a position; also, there are many unqualified people who are confused with economists. I suggest that in the absence of spectacular achievements comparable to the discovery of the atom bomb, the economist will not achieve the confidence of the public until its members are more highly sophisticated in economics than they are today. It is only too easy for a clever man running for office or sponsoring a bill to make fools of the economists in the eyes of an uninformed public.

There may be a tendency for economists who have themselves accepted compensatory fiscal policy to think that Congress and the public generally have accepted it. I fear any such acceptance is very superficial and can be readily upset by propaganda of economic and political groups with interests at stake which conflict with the expenditure and tax implications of compensatory fiscal policy.

III. *The Employment Act of 1946*

While my preceding remarks in general lead to pessimistic conclusions about the achievement of a stable economy, I hasten to say that the factors are both relative and evolutionary. We are far better off than we might be with regard to these four requisites and there is no reason to doubt that the situation can be improved with the passage of time. The Employment Act of 1946 is making a very real contribution in this direction.

The Objective of the Act. In the Employment Act of 1946¹ Congress declared it to be "the continuing policy and responsibility of the Federal Government . . . to promote maximum employment, production and purchasing power."² The Act does not refer to economic stability, or to depression, inflation, or business fluctuation. However, both the Council of Economic Advisers³ and the Joint Committee on the Economic Report⁴ have accepted the stabilization of the economy as a necessary method for promoting maximum employment, production, and purchasing power. Particular emphasis is placed on preventing depressions. There is very little evidence in the history of the full employment bill that inflation was a matter of concern. I would venture to guess that most economists would consider the lack of attention to inflation a deficiency of the Act, although an understandable one. But the Act is a very great step toward centering public attention on the problem of economic stabilization, by promoting public understanding and strengthening the effort to co-ordinate public policy toward stability.

The Council of Economic Advisers. The Council of Economic Advisers has been a very important factor in dramatizing the importance of economics and of a stable economy. I am not going into its work at this point—Professor Strayer has done that admirably—but despite justifiable criticisms of its work, I think we are much farther along the road toward economic stabilization than if it had not come into being.

Joint Committee on the Economic Report. The Congressional Joint Committee on the Economic Report, which I shall hereafter refer to as the Joint Economic Committee, has fourteen members, seven from each house, with membership from both parties. The function of the Committee as set forth in the Employment Act is:

- (1) to make a continuing study of matters relating to the Economic Report;
- (2) to study means of coordinating programs in order to further the policy of this Act; and
- (3) as a guide to the several committees of the Congress dealing with legislation relating to the Economic Report, not later than March 1 of each year, to file a report with the Senate and the House of Representatives containing its findings and recommendations with respect to each of the main recommendations made by the President in the Economic Report, and from time to time to make such other reports and recommendations to the Senate and House of Representatives as it deems advisable.⁵

The Committee does not have the powers of a standing committee with reference to any legislation. With its small staff of professional economists, the Joint Economic Committee has held hearings, made studies, and submitted reports; more than twenty-five publications have

¹ Public Law, 304.

² Section 2.

³ *First Annual Report to the President by the Council of Economic Advisers*, December, 1946, p. 9.

⁴ *Report No. 11*, 80th Congress, January 31, 1947.

⁵ Section 5(b).

been issued. The tempo of its activities has been increasing. At the present time subcommittees are making special studies of investment, monetary, credit, and fiscal policies, unemployment, and low-income families. Some of these studies are excellent contributions to knowledge on the subject. For example, the Subcommittee on Fiscal and Monetary Policy, headed by Senator Paul Douglas, sent out very searching questionnaires to certain government agencies and to a large number of economists, and published the answers in a very useful document which is widely known as the "Green Book."⁶ This Subcommittee has held a series of hearings and of conferences in executive session. The results are likely to be highly valuable. The other subcommittees are engaged in similar activities.

Since the Joint Economic Committee does not have the function of reporting bills, its opportunities to influence legislation and help in co-ordinating policy are somewhat limited. Its reports on the *Economic Report of the President* undoubtedly help to shape Congressional sentiment. It can also have some influence on legislation through cross-membership with other committees, but for a number of reasons not too much should be expected from cross-membership.⁷

Another method by which the Joint Economic Committee may help co-ordinate policy is through study of and comment on bills which are being considered by other committees. The Joint Committee staff would prepare studies for the Committee on the economic aspects of important bills and their relation to economic stability. Because of the limitation of staff and funds, the Joint Economic Committee has not been able to make this kind of an examination of bills.

Organizationally, the Joint Economic Committee poses few problems. The only one of significance is how to improve its position to increase its influence in the Congress. I suggest that this will come with time,

⁶ *Monetary, Credit, and Fiscal Policies* (81st Cong., 1st Sess., Joint Committee Print) (Washington, 1949) (443 pages).

⁷ The seven Senate members of the Joint Committee have membership on ten standing committees. There are three members on Banking and Currency, two members on Interior and Insular Affairs, Labor and Public Welfare, and Public Works, respectively, and one member on Finance, Appropriations, Interstate and Foreign Commerce, and three other committees. Six committees have no cross-membership. The seven House members are represented on nine committees, including three on the Banking and Currency Committee, two on the Committee on Expenditures in the executive departments, and one each on four other committees. Thirteen committees have no cross-representation with the Joint Economic Committee and these include the Appropriations Committee and the Ways and Means Committee, which are the principal fiscal committees of the House. Since a good deal of the cross-representation is reflected in minority party membership which may have relatively little influence on current legislation, the net effect is perhaps even less than might be indicated by the statistics. Moreover, the educative effect of the work of the Joint Economic Committee on its own members is largely limited by their activity in the work of the Committee. It is the members who are present when the hearings are held and discussions take place who are able to go back to their standing committees with the knowledge and attitude needed to promote stabilization policies.

perhaps by giving it certain powers to object to legislation being recommended by other committees.

The country is to be congratulated on the very high caliber of the membership on the Joint Economic Committee. I think it is clear that with such leadership, an adequate staff, and a fair share of good luck, the Joint Economic Committee will come to make an important impact on legislation. People being as they are, it may be expected that if Congress accepts the necessity for integrating its policies toward flexible compensatory government action, most of the members will have to absorb the information from Congressional people. The economists that serve Congress and the leadership of the Joint Economic Committee are likely to influence the individual members of Congress more than is the executive branch.

At the present stage of Congressional acceptance of stabilization policy, I suggest that the Joint Economic Committee can make the best contribution by continuing to do what it is now doing, intensifying its activities, and extending them as planned into studying and reporting on the economic effects of legislation under consideration in other committees.

The Council and the Joint Economic Committee. It is the duty and function of the Council of Economic Advisers to advise and assist the President in the preparation of the *Economic Report*. When the *Economic Report* is sent to the Congress, it is referred to the Joint Committee on the Economic Report for consideration. The statute makes no provision for any duties or functions of the Council toward the Joint Committee or the Congress. A question over which some difference of opinion has arisen is whether the Council should explain and support the *Economic Report* in testimony before the Joint Economic Committee. There appears to have been a substantial difference of opinion within the Council on this point. Others have taken up the discussion. Thus, Senator James E. Murray, who introduced the original full employment bill, has said that the original sponsors "contemplated that the members of the Council, like other public officials, should assume that degree of trusteeship for programs which the President sent to the Congress with their advice as is assumed by other agencies of government entrusted with specified functions under law." He suggests that the government could not function effectively "if those who under established law advise the President in various fields shrink from the task of discussing with the Congress and with the people those policies which they have recommended and which the President has adopted. . . . We cannot lift government above 'politics' in the mean and distorted sense of that term by having public servants reject the re-

sponsibilities inherent in the kind of political system under which we live."

He goes on to say: "An economic adviser to the President who is a man of integrity finds his problem no more difficult than that of any other man of integrity in any other branch of public service who advises the President; if the President repudiates his advice beyond the point of toleration, he is always free to resign. But while retaining his position, he should fulfill his obligations."⁸

This point of view is perhaps the inevitable one in practice and it makes a good deal of sense, although it may reflect a degree of unfamiliarity with the generally held view of economists that when they serve as policy advocates, they are acting outside their role as economists. The fact that a man happens to be an economist is no reason for his not serving as a representative of the President before Congress. As long as it is clear to all concerned that he is speaking as the President's representative, I can see no problem of integrity arising, assuming his policy views and economic beliefs are in general agreement with those expressed in the *Economic Report*. If they are not, he should resign. The advisory relationship is of such a character that in the usual case only people with the same general pattern of values and beliefs as the President can be helpful to him. I do not share the view that major divergences in economic thought should necessarily be represented on the Council.

To repeat, the problem of integrity need not arise so long as the Council member clearly is speaking as the President's representative. This means that if he cannot avoid a clash between what he would say as an independent economist and as President's representative, he must make a choice and make it clear in what capacity he speaks. Usually there would be little if any clash; trivial differences may properly be passed over, since few of us are justified in having a sense of infallibility. Moreover, it is no part of an economist's integrity to insist on the correctness of his policy recommendations. Economic study and analysis never in themselves dictate the desirability or undesirability of any policy. The emphasis should be on economics, not on policies. A clash of roles would occur if the *Economic Report* contained statements of fact and economic analysis which the Council, including the member, considered seriously in error. As President's representative he could, without loss of honor, say that these are the views of the President and give the arguments that support those views. But if his judgment as an economist is asked, he, of course, cannot agree with them. Another clash might arise if his explanation of his beliefs on economics and economic trends would make the President's policy seem to be

⁸ Communication published in the *Washington Post* of November 5, 1949.

based on purely short-run political grounds. Politics being what they are, members of opposing political parties or factions could be counted on to try to use the words of the Council member to embarrass the President; this might destroy the kind of relationship without which the adviser has no value to his chief.

Whether difficulties would rise would depend perhaps as much on the individual as on the inherent conflict of roles. Sobriety of statement, tact, and absence of partisanship and personal ambition on the part of Council members are qualities which would reduce the problem. Many times before in government, men of integrity have faced this kind of dilemma and have succeeded in retaining both honor and pleasant working relations. The persons most distressed at the conflict of roles are probably among those for whom serious difficulties would be least likely to occur. The problem, as well as a number of other problems, would be less likely to arise if there were only one Council member instead of three. There is a relationship between the Council and the Joint Economic Committee that is not open to any objection and that might be much more important than testifying before the Committee. That is the job of sitting down with members of the Committee and of Congress, one or two at a time, and discussing at length the problems of securing economic stabilization and growth. I understand that a good deal of this kind of discussion is being carried on.

The Dilemma of the Council of Economic Advisers. The question of whether the members of the Council of Economic Advisers should testify before the Joint Economic Committee is only part of a larger dilemma which the Council faces. I shall try to point up this dilemma between independence and service to the President.

First, let me say that I believe Presidents in general should be given credit for wishing to take the proper stands on economic issues and for wanting the help of economists in defending them against the tremendous private economic pressures brought to bear on them. The extent to which President Truman appears to have accepted and followed the advice of his Council of Economic Advisers should be highly gratifying to the Council and, I think, to economists generally, even those who may violently disagree with the advice. There is, however, an inherent dilemma which must be visualized as likely to arise even under favorable circumstances.

There are important values to be derived from having an independent group of economists in a position of high visibility in the government. One result of this position is a dramatic impact on the public, the Congress, and administrators of the importance of economics as such, and of economic stabilization and growth. The results of this impact in developing the economic sophistication of the public and in

promoting an integrated governmental policy directed toward stabilization may be immense. Suppose we carry this idea of an independent Council to its logical conclusion and let it devote its efforts to studying economic problems and publishing the results of the studies together with its economic views. We can visualize a body of this kind, but I believe we cannot realistically visualize it as also advising the President, at least not with public knowledge. The divergence between the Council's published views and the President's recommendations might be highly damaging politically to him. But in the absence of an advisory relationship to the President, the influence of the Council might be somewhat above that of a group of university professors with research and publishing facilities, but probably not much above it. And the publication of truths that were unpalatable to a substantial group in Congress would probably mean the end of the appropriation, as has happened in like cases before.

Suppose that instead of the Council moving in this direction, we visualize it as doing nothing but advise the President. This is the only function which the statute now gives it. In that case, what is the need of a highly visible body of three outstanding economists? There are many presidential advisers, formal and informal, but none of the others has the semi-independent trappings of the Council. The Hoover Commission report apparently visualizes the Council's true function to be advising when it recommends that the Council be replaced by an Office of the Economic Adviser to the President with a single head. The true adviser properly becomes anonymous; he has no publicity functions. This would mean that there would be no dramatization of economics and no promotion of the stabilization requisites. I suggest that a good deal of the value derived from passing the Employment Act would be lost if the Council became an anonymous advisory agency.

Moreover, using the Council in a purely advisory capacity would not seem to be in harmony with the interests of a President and I am, of course, speaking purely speculatively about how Presidents may feel. There are jobs to be done which the Council might help him do. One of them, as we have seen, is to sponsor the *Economic Report* and its recommendations before the Joint Economic Committee. Another is to help in the integration of economic policy in the executive branch. It would seem likely that, in general, a person with high political prestige would be used to integrate policy, but for economic policy, conceivably economic prestige would be even more valuable than political prestige. But if the Council is to have economic prestige with the Joint Economic Committee and with executive agencies, it must retain an independent position in the public eye. So I suggest that if the Council is to be used by the President to accomplish something that he wishes done either

with other agencies of the executive branch or with Congress, he needs a Council of economists with high prestige and a large amount of independence and freedom of statement.

Here, then, is the dilemma as I see it. A Council should be independent, but if it acts in a very independent manner, it can scarcely be recognized as an advisory body by the President, and if it is not so recognized, it loses much of its value as a body of independent economists. Likewise, the President may find it useful to have a Council which is sufficiently independent to have prestige in policy integration in the executive branch and in dealing with the Congress; yet he can hardly be expected to desire a Council which is so independent that it undermines his position with the Congress and the public. Here is a situation where both the Council and the President are benefited from the existence of what is at bottom an inconsistent position but where both run risks. The risk to the Council is that it will either lose its independence, or lose its position as Presidential adviser, or lose its neck. The risk to the President is that he is better served by having an independent Council, but if it is too independent, his position is undermined. Obviously the incompatibility of the ideas of independence and of service to the President is such that if they are carried to their logical conclusion, the structure collapses.

What would we as economists want the Council to do in this dilemma, where the position is inconsistent, but where neither horn of the dilemma is better than the dilemma itself? I think we ought to support the Council members in what I fancy they may be trying to do; namely, to carry on as independently as they can in a difficult situation. There are many inconsistent positions in this world; in fact, each of us is involved constantly in numerous more or less inconsistent positions. What the individual in an inconsistent position like that facing the Council may do is to carry on as well as he can, thinking and speaking as independently as possible but being discreet and cautious, never abandoning his standards of integrity by saying what he does not believe to be true, but not trying to say all that he believes to be true. Almost inevitably in the end, the inconsistency of the position will become too clear and he will be obliged either to withdraw from some aspect of his work or resign his position. I have no criticism of any economist who is not willing to put himself into such an inconsistent position, or, who being in it, prefers to retire. That is clearly the most comfortable choice and the most unequivocal position. But unless economists are willing to carry on in the Council under the conditions I have outlined, I doubt if we shall be able to achieve through the Council the various goals we would like to see achieved. Perhaps we should look on Council members as expendable, each carrying forward the

work as far as he individually can and then retiring in favor of others who can carry it farther before they, too, drop by the wayside. I suggest that even the institution of the Council itself is expendable and that sooner or later it will be cut down politically to be replaced by some other organization carrying forward the same functions in somewhat different ways.

There is one proposal which would set up a Council that was both independent and powerful. The proposal is that the Council should serve as a sort of supreme court of economics. I can see no place in the American scene for such an organization. The "court" would presumably "decide" either economic policy or economic truth. Policy determination in a democracy is a function for persons whose responsibilities run to the people and not for independent authorities, however expert they may be. Truth in economics, as in all science, is established by running the gantlet of the widest professional criticism and standing the test of experience. It cannot be established by authoritative bodies except, of course, in totalitarian countries.

DISCUSSION

SIMEON E. LELAND: We have listened to three excellent papers. One deals essentially with economic theories; the other two are concerned primarily with the role of the Economic Council. My remarks will be directed particularly to the position of the Council in the scheme of things.

In the first place the Council is expected to analyze economic trends and to give advice to the government as to what general policies it should adopt in order to obtain the maximum economic welfare. This is a difficult task—one of the most difficult any profession can be called upon to perform. It involves current analysis of economic conditions and inevitably some forecasting of the immediate future, even though Mr. Strayer seems to doubt the wisdom of this course. It does not and should not involve either the formulation or co-ordination of programs of specific action. That is the job of the executive and Congress. The Council has enough to do in stating the facts of the present economic health of the nation and in indicating the direction in which conditions seem to be moving. It may well say that certain policies will advance and others retard the economic health of the nation, but the job of the Council is not to formulate programs for adoption or alibis for past failures.

If the Council is to perform the services expected of it, it must be composed of the most competent economic minds that can be called into the service of the government—not one or two, if the Council has three members! Furthermore, it is to be remembered that the recommendations when made are countercyclical in character. If the trend is inflationary, for example, the Council is expected to suggest measures to counteract this tendency. Such advice as is given will in all probability be unpopular as it will oppose existing trends. The President and Congress must, therefore, recognize in advance that the Economic Council is cast in an unpopular role. Inevitably it may have to tell many people what they do not want to hear. Only the President can protect the Council in the impartial exercise of its duties. It must be guaranteed independence from political control and complete freedom to do its work and present its findings.

It is by no means certain that the President wants this type of Economic Council or that he knows what work they should do. To be effective in the discharge of such difficult work they must be independent and have the freedom of inquiry and publication associated with the academic world. When the Council is drawn into partisan politics its usefulness is at an end. Its effectiveness depends upon its independence and the wisdom of its words. It needs all the prestige that able economists on the Council and staff can give it. It also needs the support of our profession.

The situation of the Council is similar to that of a good tax administrator. Good tax administration does not mix with political domination and partisan controls. I have told more than one state governor that he could choose between effective revenue collection and political interference with his tax department. He simply could not have both. If revenue was desired, politics had

to be kept out of tax administration. Sometimes only self-denial on the part of the executive would accomplish this. This parallel applies to the role of the Economic Council. The President needs to assure the Council of its independence, put the best economists in the country on the Council, and then let it alone to do its work. The calling of economic turns and short-run forecasting are difficult enough when there are no political obstacles. When these are present only failure will result.

These things are far more essential than the change to responsible government suggested by Mr. Strayer. Conditions under which the Council could succeed can be established by the present administration. Neither they nor we can provide the English type of responsible government in the near future.

Mr. Bach has brought out clearly some of the difficulties of working for stabilization: via fiscal policy. This one device alone is not adequate, and when other governmental policies run counter to the appropriate economic or fiscal policy, the results may be disappointing or completely nil. And when important groups, such as agriculture or labor, use the government to get themselves a larger share of the national product than they otherwise could secure, an Economic Council which calls attention to the fact may expect political reprisal unless protected by the President or someone else, I know not who. Unless an Economic Council calls attention to the distortion of economic forces by political action, it is not worth much even to the government. Such forthrightness, however, weakens the political position of the Council. Its appropriations may even be cut off.

And if it reverses itself now and then as economic conditions change, many of those in political life will not understand what has happened. The Council will be accused of not knowing its mind.

The built-in devices for stabilization control have real merit in the political arena. They are adopted in advance of need—perhaps at a time when the “heat is off.” But will Congress allow them to operate or permit a clear directional change before taking action on its own initiative? It is difficult for Congress to keep hands off particularly if “just a little inflation” or “a mild decline” is popular. To what extent will public expenditures, debt reduction, or tax increases be determined by automatic or semiautomatic devices? Though the scope of these devices may be limited, many of them deserve a trial.

In this whole game of stabilization the economist fights a losing battle. Congress and the President like to take economic advice when it is popular. They duck it when the prescription is hard to take. Since it is more pleasant to spend than to tax, economists are listened to more carefully in depressions than in booms. For the resulting lop-sided policies over the cycle, economists cannot be blamed entirely. Their advice too frequently is ignored. All the more is there reason that they should speak freely when opportunity is given.

EDWIN G. NOURSE: I shall have to pass over Mr. Bach's admirable paper on stabilization theory and those parts of Mr. Blough's paper that deal with that topic and confine my remarks to what Mr. Blough and Mr. Strayer have to say about the Council of Economic Advisers as an agency to promote national economic stabilization.

Two major criticisms are directed at the work of the Council by Mr. Strayer: (1) it ventured improperly into the field of prediction, and this was bad prediction; (2) it gave "disproportionate weight to various social, welfare, and other economic programs of the Administration bearing only indirectly upon the immediate problem of economic stabilization." With both these criticisms I am in partial agreement and partial disagreement.

When I took office on the Council, I announced to all and sundry that "any prediction would be over my dead body," and I do not think that specific "predictions of things to come" can be found in any of the Council's documents. It never indulged in such prophesying as emanates from many commercial and some academic sources at this season of the year. It is one thing to forecast a recession beginning in the third quarter of the ensuing year and running to a depth of 15 points on the production index, 23 points on the wholesale index, and to 5.5 million of unemployed, and a quite different thing to say that there appears to be a trend toward inadequate capital formation or toward insufficient consumer purchasing power to absorb prospective volume of goods and to reason that these trends, if allowed to continue, would have a destabilizing effect on the economy.

The Employment Act clearly assigned to the Council a duty to advise the President and to him a duty to advise the Congress as to "economic trends, both current and prospective." To measure, or even to identify, a current trend and, still more, a prospective trend and at the same time refrain from prediction may seem a flat contradiction. I think, however, that the mandate outlines both a possible and a useful undertaking for the Council and its staff. If economists and statesmen are to detect emerging threats to the maintenance of prosperity and are to devise intelligent means for removing or mitigating those threats, we must undertake to determine the direction of economic forces and to gauge their intensity. Only so can we decide in time what corrective measures, private and public, are called for and the timing and vigor with which they should be employed.

Required as the Council was to make periodic reports on "foreseeable trends," the *Economic Reports* of the President and the economic reviews of the Council must still face such criticism as Mr. Strayer's that they were inaccurate readings of the economic indicators or incompetent interpretations of their meaning. He cites the report of January, 1947, with its concern lest business languish because of inadequate consumer purchasing power. I shall not attempt to dogmatize as to whether that was a misreading of an actual trend or whether the trend about which we expressed concern was altered in the course of 1947 by an amelioration of the purchasing power situation because of the large output and rising prices for agricultural products, increases in industrial wages, and business spending for industrial reconversion at an accelerated rate. In judging the Council's performance, it must be borne in mind that an economic trend is not something that is fixed and undeviating but instead is subject to the almost constant intervention of new forces or circumstances.

Rather than "predicting" collapse during 1947, the President's *Economic Report* in January said:

America has never been so strong or so prosperous, nor have our prospects ever been

brighter. Yet in the minds of a great many of us there is a fear of another depression. . . . In 1946, the problem of linking maximum purchasing power with maximum employment was not completely solved. . . . How to effect a mutual adjustment of incomes and prices which will provide purchasing power adequate to sustained maximum production in the years ahead thus becomes a central problem for private enterprise and Government. [Pages vii, 2.]

The midyear *Economic Report* of 1947 noted that:

The unprecedented prosperity . . . is being sustained at present by the reconversion demands of business and the backlog demands of consumers, by extensive use of savings and credit, and by extraordinary excess of exports over imports. . . . As these temporary props to our economic system weaken, we shall need to make many basic readjustments to complete the transition to a permanently stable and maximum-level peacetime economy. These adjustments . . . must be made before the lack of them produces serious unemployment and business decline. [Pages 1-2.]

The following January, the President's *Economic Report* opened with the comment:

I foresaw a bright prospect for the year 1947. In large measure that prospect has been fulfilled . . . but on a wave of inflation which has already caused serious hardship and presents grave danger for the future. [Page 1.]

Later it said:

Full employment, high wages, and large proprietors' incomes—both industrial and agricultural—pushed consumers' incomes to record levels during 1947. Most of this money was spent, and a decreasing proportion went into net saving. Consumers drew increasingly upon credit to supplement their current savings. Real purchasing power per capita has remained above prewar levels, but the sharp rise in prices has caused it to decline during the past 2 years. [Page 15] . . . Back of the income and expenditure totals . . . lies a whole network of price, wage, and profit relationships which determine whether or not we move toward economic stability. The changes in these relationships during 1947 have not accomplished that end, nor have they assured the maintenance of high production and employment in 1948. It becomes necessary, therefore, to examine the underlying facts more carefully and to uncover the dangerous tendencies which they include. [Page 34.]

Mr. Strayer passes over the reports of January and July, 1948, but in fact that year furnishes a more striking case than 1947 did of the intervention of new forces to alter economic trends. The President's *Economic Report* continued to express concern as to the trend of purchasing power vis-à-vis the prospective output of goods and services—emerging trends which in my judgment were a very proper subject of Council concern at that time. But a new stimulative factor was introduced into the situation by the President's speech of March 17 on national defense and by other developments that were noted in the following July. The Council's *Review of the Economic Situation at Midyear* said:

Effective adjustment policies have been hard to devise and harder to get accepted and applied. We appear now to be once more at a stage of renewed instability . . . with recent and prospective wage settlements contributing to the upward process; with market demand again being stimulated by the accelerating procurement programs of foreign aid and national defense, and with continuing scarcities of numerous key materials. Tax reduction has added to consumer and business demand in the market, but is incapable of stimulating a proportionately larger flow of goods from our already overloaded plants, fully employed labor force, and still over-strained supply line. [Page 305.]

An earlier report had referred to failure of market supply of industrial goods to expand as rapidly as had been anticipated.

In my judgment, one of the greatest services that a competent Council of

Economic Advisers can, through the perspicacious work of its staff, render to the President and to the economy is in frankly and clearly facing in its periodic reports the facts of changing economic circumstance and in intervals between the economic reports privately keeping the President *au courant* these changing conditions or with the technicians' revisions of their earlier interpretations. On this basis, the Council should help the President to have the agile footwork in matters of policy which, while it may prove embarrassing to an executive officer, is essential to the maintenance of flexibility of policy and action. In a changing world, such flexibility is indispensable for stability of the economy in the sense of sustained high production and employment rather than unstabilizing rigidities.

As to the Council's responsibility for the persistence of anti-inflation counsel and action in the face of the 1949 spring recessions, there is much apparent justification of Mr. Strayer's strictures. The discriminating student, however, will be careful to make distinction between (a) what was said in the Council's reviews, *The Economic Situation at Midyear 1948* and in January, 1949, (b) what was contained in the President's program at these times, and (c) the position taken by those members of the Council who appeared before the Joint Committee on the Economic Report in February, 1949. The documents are all there for the serious student. I will here simply give two brief quotations.

The Council's *Economic Review*, dated July 30, 1948, said:

... there are complex forces some working to lessen and others to intensify inflationary pressures. In attempting to judge what balance these competing forces may work out, we begin by examining some of the factors that reduce the pressure of inflation. Outstanding among these is the fact that, in many fields of production, the supply situation is greatly improved . . . we cannot ignore the prospect that unworkable relationships in the price structure, necessarily the outgrowth of unconquered inflation, may lead to a break in some other sector of the economy where the consequences would not thus be isolated [as in the farm price break of the preceding February]. If attendant developments which cannot be foreseen did not serve substantially to counteract it, this break might well carry our highly sensitive economy into a general recession of serious proportions. [Pages 44, 47.]

In the Council's *Review of the Economic Situation*, dated January 3, 1949, they said:

There are a number of factors explaining the uneven pattern of price trends in 1948. In the case of farm products, the improvement in crops has altered materially the supply-demand situations at least for the current crop year . . . in many fields there has been a disappearance of the war-created backlog demand and a major improvement in the supply position, notably in most consumer goods. There has been some drop in inventory buying. The availability of a much greater variety of products has resulted in increasing competition for the consumer's dollar. [Page 6.]

Obviously, however, these observations in the Council's *Review* were not echoed in the *Economic Report* of the President, and his program and the support of that program before the Congress by two members of the Council would, as Professor Strayer observes "discredit future recommendations [of the President and the Council] to the detriment of the whole program."

Professor Strayer's second major criticism is directed at the disproportionate weight given by the Council to proposals of "economic reform" rather than "the immediate problem of economic stabilization." He recognises that social

welfare programs and other economic reforms are not unrelated to preventive measures, which should be a significant part of a stabilization program. He feels, however, that preoccupation with certain of these programs has "tended to direct attention away from the main issue the Act was designed to solve: the prevention of, or great reduction in the severity of, business fluctuations." He pointedly mentions the inconsistency of urging the substantial expansion of these programs at a time when measures to curb inflation were being pushed as the major plank in an economic stabilization program. With this criticism I am agreed in theory, although as a practical matter, it would of course not have been possible to abandon activity in these several areas or to have attained otherwise desirable budget surpluses with a cold war in progress. Even so, the case seems to me irrefutable against the light-hearted expansion of either domestic or international expenditures now in the face of continuing inflationary trends.

On this point of the relation between specific economic policies and economic stabilization as an integrated concept, Mr. Blough has a realistic and sound comment. He says:

Virtually every other policy of government has some bearing on the volume of total demand, production, or employment, and accordingly has a bearing on economic stability. In the case of some objectives of governmental action, the imperative character of the objective may make it necessary to exclude effects on stabilization from consideration. This is all the more reason for integrating with the policy of stabilization all programs where such integration is possible.

These are wise words for the Council, for the Budget Bureau, and for all executive heads. And they seem to me a good description of what the Council was really trying to do. The actual thinking and the policy suggestions of the Council and its staff as I observed them seem to me to have been quite definitely focused on the central problem of how to promote dynamic stability in a total economy. But we were trying to promote such an end not merely by aggregative measures of the fiscal and monetary type but also by particularized efforts to secure better price-income adjustments within the market and bargaining system.

I think Mr. Strayer is not warranted in proceeding from even patent flaws of form and emphasis¹ in the Council's product to the conclusion that this constitutes a basic shortcoming in the Council's whole attack on the problem. He says:

The Council has seemed to draw the conclusion that no general stabilization devices can be developed that will operate more or less automatically and that such devices do not merit serious consideration at the present time.

Is it not true that fiscal policy, taxation, and Federal Reserve credit policy are dealt with in every report and review, and these clearly in the perspective of debt management, although that highly technical issue is touched on only

¹ In a group of this sort, the man who wants to "carry a torch" cannot be ruthlessly slapped down. There were times when I myself felt strongly that some of the more remote or ambitious ratiocinations would more wisely have been kept for internal consumption than made part of a state paper designed to present a current "stabilization program."

briefly? I can testify that these matters of over-all stabilization devices loomed large in staff discussions and in the specialized work of the Council's Stabilization Devices Committee. In the Council's *Economic Review* of January, 1949, there was specific reference to the "built-in flexibilities" of social security payments and reserve accumulation, agricultural supports, and the like, besides the stabilizing effect of progressive income tax schedules.

I am aware that this rejoinder will not satisfy Mr. Strayer—or a sizable group of other economists. They are the ones who have faith in federal fiscal policy and in direct stabilization of the monetary unit as sovereign remedies for the economic instability that creeps into a complex industrial society. In the philosophy of this "aggregate" approach school of thought many of the stabilization adjustments to which the Council gave such serious consideration are merely superficial salves and local fomentations.

I have no right or desire to implicate other Council or staff members in my comment on this basic doctrinal issue. But for myself I freely admit my lower estimate of the primacy of the aggregative approach (without denying its complementary significance). I frequently said that that seemed to me the basic objection to the Murray "full employment bill" that preceded the drafting of the Employment Act. It seemed to me, on the other hand, a merit of the present measure that it gave us an opportunity to develop policy eclectically along all pertinent lines of approach. Insofar as I influenced the working program of the Council over a three-year period, my efforts were directed toward developing a three-pronged attack, with none of the three neglected, but with great flexibility in shifting emphasis from one to another as occasion demanded. These three lines of attack, I would describe as (a) fiscal and monetary policy, (b) institutional reform, and (c) improved business practices. Mr. Strayer's paper indicates clearly that he would strongly approve the first of these, and feels that its development by the Council was grossly inadequate. He would approve the second, but chide the Council for having handled it badly—doing both too much and too little. The third line of approach, he apparently would recommend dropping.

Mr. Strayer thinks the Council went too far in recommending institutional changes that smacked of reform rather than dealing with "the immediate problem of economic stabilization." On the other hand, he says: "Even more serious is the failure of the Council to consider the fundamental changes in the structure of the economy which may be necessary if stabilization is to be achieved in our time within a free market system."² What, then, are these institutional features whose correction would cause the market system to function "automatically" toward stabilization? Mr. Strayer cites "the present system of concentrated economic control of industry and, more recently, labor." The Council's failure to do something significant toward reforming this institutional situation is ascribed to "an underlying assumption that [that system] is inevitable."

This is a considerable overstatement. Undoubtedly no report of the Presi-

² I think this sentence would have read better if it had been phrased "within a market system" or "within a considerably-administered market system."

dent or the Council to date deals at all forthrightly with the institutions under which labor, management, agriculture, or finance now operate. But the Council has initiated and, within the limits of a hard-pressed time schedule, has prosecuted analyses of several subareas within this general group. Mr. Strayer is unquestionably right in saying that much more needs to be done in these areas, and done without the gingerly approach which certainly has characterized many parts of the Council's work. I think he is wrong, however, in holding the Council derelict in not having "made the public more nearly aware of its thinking on this matter." That would have been premature after so short a period of grappling with these ancient problems in the new setting of Employment Act objectives. As its studies progress and its judgment ripens, the Council should make the President, Cabinet officers and agency heads, and the profession aware of its thinking and that of its staff in these matters. Moreover, the voice of experience tells me that perhaps even in the longer run a certain amount of reticence in public is necessary for a Council member if he is to "live to fight another day."

It is, I suspect, at this point that a basic difference exists between Professor Strayer's philosophy of a desirable Council program and that actually pursued. He emphasizes the goal of finding institutional arrangements and operative rules that, once formulated, would act as "more or less automatic" regulators of the economy, keeping it on a course of reasonable stabilization. He is skeptical of the efficacy or desirability of specific or selective controls. In this I agree with him rather than with those who caused such controls to be so favorably presented, either directly or vicariously, in several of the documents under review. He is right, also, in pointing to the need of arriving at principles of market structure and functioning which would produce generalized conditions of economic stability; that is, flexible readjustment to changing conditions. This was why the Council set up a major staff committee under the title, "Wage-Price [including profit] Relations and Policies."

But I doubt that these principles could be embodied in our institutions and then operate on an essentially automatic basis. I cannot accept his suggestion that the administrative policy of those executives who conduct actual business operations within this institutional framework is something to which the Council need not give attention because "this road to stabilization is doomed to failure in the foreseeable future." I do not believe the automobile can ever attain a degree of technical perfection which will make the qualifications of the driver a matter of indifference. Similarly, our economic understanding and the criteria of values entertained by corporation officials, union executives, private operators, and government officials will continue to be a matter of correlative importance in the attainment of stabilized high productivity in our economy along with the institutions of the market (in the inclusive sense of that term) and the action of central government in the exercise of monetary and fiscal control. In other words, I still argue for the third prong of the Council's trident.

This brings us to issues of political science or public administration rather than economics as such. They are important for our consideration, however, if we wish to see professional economics become effective in the public serv-

ice. They involve questions of allocation of time and of definition of role. Both Mr. Blough and Mr. Strayer give considerable attention to this matter. The latter's position seems to me to involve a contradiction. First he says the Council should provide a "kit of tools" with which the government could undertake direct action to stabilize the economy and also develop such institutional structures as would condition private activities to the same end. The factual analysis, the diagnosis, and the prescription (to say nothing of education) involved therein would seem a task so large for a three-man Council with a staff of seventeen professional employees as hardly to be expected in the brief period of three years. Certainly it would not leave them time to engage in either educational or propaganda activities in the legislative area.

And yet Mr. Strayer is emphatic that the Council should be available at the call of the Joint Committee on the Economic Report or any subcommittee thereof and should respond to whatever requests for reports on *ad hoc* problems these committees may elect to take up for investigation. This would mean dropping the Council's own study program, for which they have little time free of duties in connection with the periodic report. The Council can never even do the pioneer work which Strayer rightly suggests that it should do if it is made an appendage of the Congress rather than a link between top executive policy and a quickened program of rethinking economic theory by the profession and re-examining business practices by the executive group of management, labor, agriculture, and finance.

Since he cites the episode of the subcommittee on co-ordination of monetary, credit, and fiscal policy and deplores what he calls "the refusal of the Council to answer the questionnaire," I will quote just two of the fourteen questions which it included:

What should be the guiding principles and objectives of the monetary, credit and debt-management policies of the Federal Reserve and the Treasury? In what respects, if at all, would you criticize the guiding principles and objectives of these policies in recent years?

Have the policies of the Government agencies that lend and insure loans to private borrowers been satisfactorily coordinated with each other and with general monetary and credit policies? If not, what have been the major deficiencies?

While I did not myself prepare the original draft of the Council's reply, I was in full agreement that it was both impossible for us to acquaint ourselves with the voluminous materials upon which a creditable answer to such questions could be based and that, in view of the delicate policy issues and administrative relationships involved, it would have been highly inexpedient for us to undertake it. We were desirous of co-operating in this study in any practicable way, and I believe that such a way was suggested in the two closing paragraphs of our letter:

It therefore occurs to us to suggest that we could perhaps be most helpful to you, not by undertaking statements of opinion on the issues raised in your questionnaire but by cooperating with you in winnowing out the material which you will receive from the sources to which the questionnaire is sent.

If you will permit us to keep ourselves or designated members of our staff informed about the responses which you receive, we could then join with you in sifting from the voluminous material gathered in that way those parts which seem to us to be most il-

luminating or helpful for specific consideration by your committee. It could then be determined whether some member of the Council might appropriately discuss with your committee certain of these issues or some of the materials submitted in response to the questionnaire.

I agree fully with Mr. Strayer as to the vital importance of considering how whatever economic wisdom the Council might develop could be made actually effective and also as to the practical difficulties in doing so. But I take a quite different view as to the degree of influence or power that should be sought and the means by which it should be attained. Strayer says:

... the extent of co-ordination of economic policy within the executive branch and between the executive and legislative branches of the federal government is far short of what is required. Until this fault is corrected the chance that the Council can become effective in *promotion of stabilization devices* or in its specific recommendations regarding the requirements of governmental action at any particular time is poor ... the decision to place the Council in the President's office was a wise one. Only as the Council can use the authority of the President can it hope to get either *the notice it requires* or can the development of balanced plans and programs be hoped for. ... Much has been made of the issue whether Council members should appear before Congressional committees in support of the President's program. On this issue there has been misunderstanding on both sides and the relations between the Council and Congress have suffered accordingly. ... Certainly the continued gulf between the Council and the Joint Committee cannot continue if *positive action is to be taken*. [Italics added.]

This presents a picture of the Council as a policy-making and effectuating body which is sharply at variance with my conception of it as a professional staff arm of the Executive Office. One will search the Employment Act in vain to find any legislative assignment of such a role. On the contrary, the independent approach by the Joint Committee was made clear and is facilitated not merely by the provision of a staff of its own but also by recent enlargement of the staff funds of the Legislative Reference Service of the Library of Congress.

Mr. Blough takes both sides of the argument. After observing that "the statute makes no provision for any duties or functions of the Council toward the Joint Committee of the Congress," he quotes Senator Murray's recent assertion that the original sponsors:

contemplated that the members of the Council, like other public officials, should assume that degree of trusteeship for programs which the President sent to the Congress with their advice [*sic*] as is assumed by other agencies of government entrusted with specified functions under law. ... An economic adviser to the President who is a man of integrity finds his problem no more difficult than that of any other man of integrity in any other branch of public service who advises the President; if the President repudiates his advice beyond the point of toleration, he is always free to resign. But while retaining his position, he should fulfill his obligations.

Although this completely denies the uniquely professional and nonpolitical role of the Council, Blough feels that "this view is perhaps the inevitable one in practice and it makes a good deal of sense." He makes a shamed-faced gesture toward the "generally held view of economists that when they serve as policy advocates, they are acting outside their role as economists," but adds, "the fact that a man happens to be an economist is no reason for his not serving as a representative of the President before the Congress."

Members of the Council do not just "happen to be economists." Under the law, they are supposed to be chosen because of peculiar qualifications as

technical aides to the President. Of course each member will have his own ideas of what a sound and integrated economic policy would be. He cannot possibly be in possession of all the extra-economic materials which will enter into the political decisions of the Chief Executive under a party system. The role of the Council is to make an ideal policy of its own for purposes of discussion with the President and agency heads. It is not its role to make and advocate extra-economic policy, to urge in the legislative area, or to appear there as economic attorneys to argue for the President's policy.

I would not disparage the role of the attorney in our courts of law, though even there the man must face issues of personal integrity. Nor would I disparage the political role of those who are ex officio members of the President's political team. Senator Murray's mistake (or his balked intention) lies in the idea that the Council should be a part of the political machinery. The only real justification for this additional device within our government is to give it the unique nonpolitical role of making the conscientious scholar a technical aide to the executive branch or of bringing scientific analysis actively into the consideration of policy alternatives. If that interpretation is given up, the Council becomes a supernumerary agency. The writing of the *Economic Report* of the President could be expeditiously done by the White House staff.

The suggestion that one should not be appointed to the Council unless his economic views are essentially in accord with those of the President and that he should resign if later it appears that he does not follow the President's economic convictions or expediencies is no solution. In the first place, it would break up that continuity of staff work on any basic study program and would destroy that professional prestige which should go with the office. But, much more important, it would mean that no one could survive in the Executive Office to give the President objective reactions to situations and proposed solutions as they emerge. That is the constructive innovation that the Employment Act proposed for our government, not the creation of three attractive jobs for economic "yes men." Blough's statement that "the advisory relationship is of such a character that in the usual case only people with the same general pattern of values and beliefs as the President can be helpful to him" seems to me a grave distortion of what the role of economic advisers should be. I myself am one of those old-fashioned girls who has no liking for the idea of being a "kept" economist, even of the White House.

Professor Strayer not merely notes the difficulty of making objective economic policy effective amid the pressure politics of a democratic government. He makes positive suggestions for obviating this difficulty. He quotes Dr. Goldenweiser's address of January, 1947: "Better organization of the government, more direct and effective ways of translating programs into action must be devised and instituted" through "greater party discipline and an approach to a Cabinet form of Government" in the executive branch. Strayer adds to this: "With a responsible party leadership there is chance that the professional economists could make a major contribution to the stabilization of our economy. This assumes that the party in power is willing to use the knowledge available."

This is a heroic assumption. But beyond that, the whole concept expressed is one of a Council having more power and active responsibility than seem to me to be contemplated in the present law or to be compatible with our frame of government. I take it that both Goldenweiser and Strayer intend to make a somewhat revolutionary proposal. But to my old-fashioned mind, their remedy smacks of implemented planning or authoritarianism to a degree that I find distinctly disquieting.

The real difficulty is not that the role assigned under the law is too limited but that in this Administration the actual position of the Council has undergone such progressive attrition or debasement that it bids fair soon to be negligible.

PROBLEMS OF AN ADVANCED DEFENSE ECONOMY

PLANNING DEFENSE PRODUCTION

By CHARLES HITCH
The RAND Corporation

When I was first asked to talk about the production problems of an advanced defense economy I accepted, expecting to select one or more of the problems which exercised the OPM, SPAB, WPB, and OWMR in the years 1940-45—"feasibility," perhaps, "bottlenecks," requirements for facilities, or the necessity for production controls.

On reflection I decided instead to discuss a problem which I consider more fundamental, and more fundamentally economic, than any of these; namely, how we should allocate our defense resources or budget among the production of the various goods and services which contribute to our security. I assume, in common with other speakers on this program, that the defense budget is large in relation to past experience, and that there is a continuing threat that we may be plunged into war quite suddenly.

I propose to approach this problem of allocating the defense budget from the point of view of a governmental authority which controls both strategy and procurement—say the National Security Council plus the Joint Chiefs of Staff plus the procurement offices of the three Services and the National Security Resources Board. I thus abstract from all the important political and administrative problems of who does or should make decisions. I assume that this authority must operate within the limits of a defense budget fixed by the Congress.

Obviously there is a "feedback" here—the size of the defense budget should depend in part upon the amounts of security that can be purchased for different numbers of billions of defense dollars. We will simply assume that the Congress bases its budget decision in part upon such advice from our authority and in part upon advice from the other speakers on this program or the Council of Economic Advisers or whoever is best qualified to trace the consequences of military expenditure on employment, economic growth, and public morals. In one respect I propose to do violence to the facts of American political life; I assume that appropriations for defense can be freely transferred, within the limits of the total defense budget, from any one category of defense expenditure to any other.

The problem of our authority is analogous to the problem of any

economic unit working within budgetary or other financial constraints. It is therefore a problem which economists should take in their stride. The services performed by the armed forces (training, maintenance of equipment and personnel, construction of military facilities, etc.) can easily be regarded as part of the defense "economy," along with aircraft plants, arsenals, and the rest of private industry engaged on defense contracts or subcontracts. The whole Air Force, from the economist's point of view, is a single mammoth firm, buying from other firms, and producing bomber sorties, fighter sorties, transport sorties, etc., with given quality characteristics and time and place utilities.

The formal solution provided by economic theory for this sort of problem is well known. We achieve the optimum allocation of productive resources by equating the ratios of the marginal costs of every defense good or service to the ratios of their respective marginal utilities. So far, so good. Trouble begins at a more mundane level of economics when we attempt to give some substance to the cost and utility functions.

Let us begin with the utility function. In letting defense contracts, what is it that we should try to maximize? I suggest, as a possible criterion of "military worth," some function of the probability that, if war breaks out at any time, we shall win it. This ignores the sacrifices of winning, other than those implicit in our budget conditions, but this is probably not too important; we are willing to make great sacrifices, once a war begins, for a small improvement in our chances of victory. It also ignores the potentially important effect of defense expenditures on the probability of war. We are, however, concerned only with the allocation of a given defense budget; so the dangers of a Richardsonian armaments race¹ are outside our domain. Until a better theory of international relations has been developed I propose to assume that that allocation of a given defense budget which maximizes the probability that we will win if war breaks out does not increase the probability that war will break out.

We have merely specified "some" function of the probability that we will win. For many comparisons—e.g., between weapons whose development and production have the same time dimensions—this is sufficient. But in general it is not. Wherever the choice lies between a weapon now in production and a better one requiring development, we must sacrifice some security now in order to achieve more in the future. In the general case there must be some method of weighting expected security at different future times. I do not intend to discuss the possibilities except to say that the right method must be a conservative one, assuming

¹ Lewis F. Richardson, "Generalized Foreign Politics," *British Journal of Psychology Monograph Supplements*, No. XXIII, 1939.

rather sharply diminishing utility to increments of security at particular times. It is vitally important to avoid "soft spots," in time as in space, which would present an aggressive enemy with good opportunities to attack. A possible solution is suggested by the philosophy-of-game theory; we might choose that allocation of our budget which would maximize our minimum security. Alternatively we could maximize an explicit function reflecting (a) diminishing marginal utility of security at any point of time, (b) some discounting of the more remote future seen through a fog of uncertainty, and possibly (c) the views of the National Security Council on the varying probabilities of war at different dates—if our intelligence on the capabilities and intentions of potential enemies is strong enough to support such inferences.

To make a completely "rational" allocation of our defense budget it would be necessary to calculate, for all items of defense expenditure, marginal utilities in terms of our military worth function and marginal costs. This sounds difficult enough, but the real problem is even more formidable. For defense in a bipolar world is not a simple maximization problem. We are neither a monopolist nor a polyopologist, but a duopolist. The only intellectually satisfying approach to the problem is one which, like game theory, explicitly takes into account the interrelations of the decisions made by two opposing powers.

I am not, however, proposing a grandiose system of Walrasian equations—game theoretic or otherwise—to solve the whole allocation problem. Such a system may or may not be a desirable ultimate objective: within the foreseeable future all that we can hope to do is to expand the area of "rational" decisions and reduce the element of "judgment" or hunch in the planning process. This requires a satisfactory general framework for analysis, the outlines of which I have suggested, and the solution, within that framework of a multiplicity of suboptimization problems at various lower levels.

Let us take a military example. Suppose that, on the basis of judgment or hunch, the following "high level" decisions are made: (a) the defense budget is allocated between Army, Navy, and Air Force in accordance with some general strategic concept; (b) the Air Force budget is divided between strategic, tactical, defensive, and support forces.

We have now reached a point where an analytical approach begins to look practicable. Let us consider the problem of suballocating one of the Air Force budgets—say, that for the defense of continental U.S. We must first find an appropriate one-dimensional physical or economic measure of the effectiveness of our defense forces of which military worth—as we have defined it—will be a monotonic function. There are several possible measures which appear to satisfy this condition. The

simplest is probably number of enemy bombers shot down before delivering bombs on target. Another—negatively related to military worth in this case—would be the reduction in U.S. industrial or munitions output caused by the bombers which do get through. A third—also negatively related to military worth—would be the casualties caused by the bombers which get through. It is significant, fortunate, and I suspect fairly typical that all of these measures are likely to be so highly correlated that it would make little practical difference which was chosen.

The next step is to select interceptor plane types, missile types and sizes, etc.; and to allocate the defensive budget among interceptors, missiles, radar, personnel, airfields, etc., in such a way as to maximize (or minimize) our measure of defense effectiveness. This is suboptimization.

The example which I have given is at a fairly high decision level. The method is a very flexible one which can be applied at any level at which our ingenuity can devise a measure or even an index of effectiveness which varies regularly with military worth.

The actual technique of suboptimization can vary widely, and may or may not involve the explicit calculation of marginal costs and marginal utilities. Some methods of calculating marginal utilities for this type of problem were developed by operations analysis units during the last war and have been described by Blackett as the "variational method."² I propose to return later to the problems of calculating costs. Suboptimizations may be simple maximum problems or may, where enemy reactions are important, require the techniques of game theory.³ In some cases the "solution" might involve using real or simulated markets.

I know that this type of approach has its critics. There are always people who distrust chains of abstract reasoning, particularly if mathematical symbols are used. Others, more reasonably, fear that the answers are too clear cut and ignore the desirability of reducing risks by backing more than one horse. It may be possible to meet this latter objection in some cases by introducing uncertainty and probability considerations into the analysis. Where this is not practicable, analysis can reduce the area in which "judgment" operates to the introduction of insurance considerations as a modification of the conclusions. This can be done with some idea, derived from the analysis, of the probable cost of the insurance.

More particularly it is objected that there is never any assurance that a mere suboptimization would represent any kind of optimum had the

² P. M. S. Blackett, "Operational Research," *The Advancement of Science*, April, 1948.

³ See John McDonald, "A Theory of Strategy," *Fortune*, June, 1949.

higher decisions been properly made. To take an extreme case based on our example, a truly optimal allocation between Army, Navy, and the Air Force might involve cutting the budget for the defense of the continental U.S. to zero.

All of this is perfectly true, but the implication is certainly not that we should neglect efficiency in making allocations at lower levels. Regardless of how the high-level decisions are made, given these decisions, the efficiency of the defense system will be greater the more efficiently the suboptimizations are achieved. Moreover, if we make the suboptimizations at lower levels we can frequently sharpen the problem and improve the exercise of judgment at high levels.

I suspect that the efficiency of the defense system may be more sensitive to the lower-level decisions than to the high-level ones. At the very least, it is sufficiently sensitive to the lower-level decisions to justify a great deal of work in having them made right. The United States economy has become the strongest and most productive in the world because of its efficiency in solving suboptimization problems at very low levels. We out-produce the world not because we have been exceptionally clever at dividing resources between consumption, investment, and government; or income among individuals and classes. Modern theories of monopolistic competition cast a good deal of doubt on the optimal character of the division of our resources among industries or even among firms within industries. I know no reason to suppose that we have solved any of these high-level problems much more efficiently than other countries. Our superiority stems almost wholly from our superlative efficiency in making the lowest decisions of all—in choosing the lowest cost functions for particular products, in replacing one machine by another, or labor by a machine, in devising and choosing superior product characteristics. We have managers of firms who solve hundreds of thousands of suboptimization problems, taking their profits as the measure which varies monotonically with the nation's welfare function. And by doing this well, bothered by no philosophic doubts regarding the relation of relative to absolute optima, they have put us streets ahead of other economies.

Perhaps other economies, by explicitly making the high-level decisions (regarding investment, for example) and by developing improved rational techniques for making them, can catch up or surpass us. I do not believe they can unless they are able simultaneously and drastically to improve their methods of low-level suboptimization.

Without making invidious direct comparisons between the efficiency of our armed services and of industry, I would feel reasonably secure if our armed services were as superior to those of potential enemies in solving their lower-level suboptimization problems as American industry

is to those of its overseas competitors in solving problems of the same kind.

This brings me to the part of the analysis which is most specifically the economist's business. Intelligent defense planning decisions at lower levels require much greater knowledge than we now have of production or cost functions. There are two things wrong with the work which has been done by economists in this field. The first is that there has not been nearly enough of it. We have not attempted to derive cost functions with realistic numbers for more than a handful of firms or industries. We do not even know what techniques to use in estimating them. The second is that the whole problem has been too narrowly conceived.

The emphasis of traditional economic theory on supply and demand analysis has very naturally led to the choice of rate of output as the strategic variable in empirical studies of production functions.⁴ Now rate of output is probably one of the important variables to take into account in planning defense production. If there are economies of scale in the production of some items—either plant-wise or industry-wise—we want to take advantage of them. The only trouble with the scale studies is that they have not been very numerous or conspicuously successful. Our knowledge of empirical laws of return is, at best, fragmentary.

I suspect strongly, however, that the rate of output is not the most important variable to investigate for this type of production planning. The critical problems are more likely to involve costing quality versus quantity rather than small quantities versus large.

For example, how frequently should aircraft models be changed to incorporate technical improvements or design modifications suggested by tacticians? The more frequently such changes are made, the higher the quality of at least a part of the Air Force. But at what cost is this improvement in quality purchased?

The answer depends upon the relation between cost and the cumulative output of each aircraft model. To some extent this may be influenced by economies of scale, in the strict sense of traditional economics. But it seems to depend mainly upon (a) the cost of achieving full-scale production of a new model (engineering research, development, the extra costs of build-up); and (b) "learning" by management and labor, in a sense which is familiar to psychologists but strangely unfamiliar to professional economists.

"Learning" has long been recognized as an important cost reducing factor by the engineers and cost accountants of the aircraft industry. If the marginal direct labor costs of producing a given model in a

⁴The Cobb-Douglas group is an exception; traditional distribution theory directed its emphasis toward relative quantities of factors.

given facility are plotted on double-log paper, with cumulative output on the abscissa, labor costs fall, significantly, almost universally, and with fair regularity. The average slope has been alleged to be about minus one-third (hence the term "minus one-third law").⁵ Tests of the validity of these curves showed them to be the best single predictor of labor requirements, with an average error of estimate in some World War II cases of about 25 per cent. The estimates were not significantly improved by adding rate of output or any other independent variable.

The explanation of this law is obscure, as is its applicability to other products and other circumstances. It is not clear who does the learning—management, labor, or both—or how far "minus one-third" can be extrapolated. It may be, of course, that learning is significant only for new models of products whose output is suddenly expanded. Even if this were the case, it would be extremely important in planning production in an advanced defense or a wartime economy. The Bureau of Labor Statistics has analyzed a learning function in wartime shipbuilding which appears about as regular and as linear as the aircraft function but with a lower average slope.⁶

At the other extreme the learning function might be found to have a satisfying rationale and very general application, to possess fairly uniform slopes within any economic culture, and to account for much of the observed regularity of "technical progress" over time within national economics. At the very least, it is a most promising field for investigation by economic theorists, economic statisticians, and engineers—possibly a more fruitful field than the investigation of traditional scale economies.

I want to close with one more example. The problem may not be frequency of model changes but simply choice of model—say, the optimum speed, size, rate of climb, etc., of a fighter aircraft. In order to make the choice it is necessary to cost the relevant characteristics of the product in various combinations. Ideally, this should be done dynamically as a function of the state of the arts; here it merges with our previous example.

This sounds like an engineering problem, but so in this sense are all cost and production function problems. The economist is concerned with whether there are any regularities in either the form or the parameters of the function, with their explanation, and with techniques for discovering them. In this case, as with other cost functions, how much reliance can be placed on "straight" engineering cost estimates? What is the variance and bias? How can time series data be analyzed as a

⁵ See the *Monthly Labor Review*, August, 1945, pp. 215-225, and S. M. Robbins and T. E. Murphy, "Economics of Scheduling for Industrial Mobilization," *Journal of Political Economy*, February, 1949, pp. 30-45.

⁶ *Monthly Labor Review*, December, 1945, pp. 1132-1147.

check on or as an alternative to *ad hoc* engineering estimates?

One promising production function technique is "linear programming" or its variant, the Leontief input-output matrix. I have ignored it because it is the subject of another session of this meeting. Its first practical application may be to the internal organization of the Air Force—to the programing of procurement, training, and operations in an efficient and self-consistent manner. This is intrafirm planning within our conceptual framework. Its application to the economy presents greater difficulties. Certainly, if it can be made to work at all, it should provide a ready means of testing the feasibility of a war production program, and of indicating bottleneck areas requiring the construction of new facilities or the study of substitution possibilities. In the type of optimization problems which are the subject of this paper, linear programming may provide a useful model for analyzing alternative production capabilities. In relating production capabilities to military worth or national security the nonlinearities appear so essential that a model which incorporates them explicitly seems more suitable than one which drags them in tortuously and approximately.

Economists are unfortunately in no position to give positive answers to any of these questions. We know too little about the shape of reality, as opposed to the forms of the possible. I hope that we will try to answer them, undeterred by the apparent novelty of these applications. The attempt promises not only to improve our planning of defense production, but also, in the process, to advance the science of economics.

ARE PRICE CONTROL AND RATIONING NECESSARY?¹

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Regardless of what may be the requirements for economic controls under conditions of actual warfare, the presumption is against the use of price control or rationing in a cold war. Yet there has been evidence, the last two years, that at least some economists may be somewhat favorably disposed towards the use of these direct controls, in spite of the inevitable inequities, the insoluble administrative difficulties, the staggering burden of expense, both of money and of manpower, and the gnawing irritations and frustrations that are involved in their use.

The question whether price controls and other direct controls are likely to become necessary if, in our preparations for a potential war, we should expand very considerably our present scale of military expenditures was squarely faced by E. T. Grether in a paper presented before this Association a year ago.² His answer was, that while price controls were probably not required at that time, it was to be anticipated that they would be needed if our military expenditures expanded very much. He appeared to take it for granted that if we should approach "a war footing" we would have to adopt step by step much the same pattern of direct controls as we developed in World War II.³

There certainly would have been little disagreement with Dr. Grether a year ago when he said that price control and other mandatory controls were not required at that time. The same position could be safely taken today. In fact, it is conceivable that we could devote a considerably higher proportion of our Gross National Product to war purposes than at present without needing to be concerned very much about inflation from this source.

It would be unwise, however, not to reckon with the inflationary forces that are latent in the present situation. A federal cash deficit of possibly as much as five billion dollars is in prospect for the current fiscal year. The policy of maintaining interest rates at relatively low levels is likely to continue. The upward pressure on wage rates, although less strong than in recent years, gives every evidence of continuing as a positively inflationary force. Total liquid assets of indi-

¹ I am grateful to Armen Alchian and Edward S. Shaw for helpful suggestions.

² "Preparedness for War and General Economic Policy," *American Economic Review*, May, 1949, pp. 366-377.

³ I find comfort, however, in the fact that Arthur Smithies, on the same program a year ago, very ably presented the case for avoiding a resort to direct controls. "Fiscal Aspects of Preparedness for War," *ibid.*, pp. 356-365. In what follows, my debt to him will be apparent.

viduals and business firms were still about 235 billion dollars in July, 1949. It is quite possible that if the international situation were to become more serious and if we considerably expanded our preparedness program, we would be faced with the necessity of taking positive steps to check inflationary tendencies.

It is assumed, then, that we are concerned with an advanced defense economy in which defense preparations may come to mean an increasingly heavy burden on the economy and in which inflationary pressures may develop. In such an economy, is it to be anticipated that some form of price control or rationing, or both, will be necessary and desirable?

Most economists, I believe, would agree that resort to price control and rationing is to be avoided if at all possible. As compared with the indirect controls of fiscal and monetary policy, price control and rationing are likely to be more expensive to administer and enforce; they are regarded as infringing upon the freedom of the individual to a greater extent and as more subject to abuse by the bureaucracy; they seriously impair the usefulness of the price system as a guide to production in the civilian sector and as an automatic rationing device; and they are likely to have more serious postwar consequences for the economy. Although it is possible to imagine circumstances under which some of these disadvantages of direct controls would be equally present in the case of fiscal and monetary policy, these circumstances would be extreme ones. In general, there is a strong presumption on economic and political grounds against the use of price control and rationing. Those economists who fought and bled for OPA would, I believe, be in the forefront of the supporters of that position.

The difficulties that price control and rationing involve are, moreover, likely to be even more serious in an advanced defense economy than in a war economy. In order to examine these difficulties more closely, let us assume that, as the cold war develops, inflationary tendencies are not fully counteracted by fiscal and monetary policies, and that accordingly either general price control or general expenditure rationing is employed. For a time, the inflation is suppressed, and the unspent margin is accumulated in the form of liquid balances held by individuals and business enterprises.

It will be recalled that one of the reasons that while World War II lasted OPA was more successful than many ever thought possible was the fact that individuals and business enterprises were willing to permit balances to accumulate to an extent that could hardly have been anticipated. During the war, many of the goods that were wanted were not available at all or were at least difficult to obtain, but it was expected that they would become available at reasonable prices when

in a few years the war would come to an end. The postponement of buying and the willingness to hold larger and larger liquid balances took care of much of the inflationary gap and facilitated the maintenance of price ceilings and adherence to rations.

To a very considerable extent, this willingness to hold liquid balances and to postpone purchases until after the war was dependent upon the expectation that the war would not be a long one. On the other hand, in the case of the present cold war, the conservative expectation is that it may, and probably will, be a very long one. If under these circumstances we should undertake to suppress inflation with price ceilings and rationing, I doubt very much whether we would be aided, as we were in World War II, by the willingness of people to postpone their buying and to accumulate balances. It may seem too long to wait.

This weakness of direct controls when the cold war is expected to last a long time would be present whether the scheme adopted were general expenditure rationing or price control. In either case, consumers and business enterprises alike would have money incomes larger than they would be permitted to, or could conveniently, spend. Saving would be encouraged in the one case by a definite limit on expenditures; in the other case by the scarcity of goods, partial rationing, and the expectation of plenty of goods after the war. In both cases, however, the expectation that the postponement of buying would be for many years would greatly reduce the possibility of effectively administering the controls over the long period.

Other difficulties as well are likely to develop with price control in particular if the cold war period should turn out to be a long one. General price control, if it is employed, may in the course of time have an adverse effect upon production—particularly if the "freeze" technique is employed, as was so extensively used in the last war. The longer the period during which the ceilings must be maintained, the more obsolete the frozen prices become. Base-period prices form a pattern which is far from perfect to begin with, and as time goes on, production of certain commodities is discouraged by the fact that other commodities are relatively more profitable to produce. There is a strong incentive to eliminate low margin items, to deteriorate quality, to produce new commodities to which no base-period price can be applied. Resources are wastefully employed, consumers become irritated, and honest manufacturers suffer injustice. These evils increase the longer the period to which the frozen prices are made to apply. It is quite conceivable that in a long drawn out cold war price control based on the freeze technique would in the course of time seriously discourage production—finally breaking down entirely as the result of its unpopularity with producers and consumers alike.

The alternative of fixing individual prices by administrative action is probably better but is beset with staggering difficulties, the seriousness of which is likely to be greater the longer the period during which the price ceilings are to be preserved. The accounting difficulties of determining costs of production are well known. They would be without a satisfactory solution even if competent accountants not susceptible to influence exerted by the interested parties could be readily obtained by government in the large numbers that would be required. Furthermore, even if the appropriate cost figures could be determined by accounting methods, they would be out of date before the economists and the lawyers would be able to reach agreement on a price regulation. Then there is the matter of the profit margin to be allowed the industry. If the answer is sought in a base-period profit figure, inequities will exist as between industries; and the longer the period for which industry profit rates are frozen the greater the inequities will probably be. There is no reason to assume that the historical rate of profit in any event is the appropriate rate for the present and future. If the cold war is likely to last a long time, the structure of industry must be permitted to change in accordance with changing technique and changing demands. Frozen profit rates do not encourage the desirable changes in production. The fixing of individual price ceilings by administrative action was difficult enough to do well for the relatively short period during which OPA lived. These difficulties would be even greater in an advanced defense economy in which the ceilings had to be maintained for a much longer period.

Even if all of these difficulties could be met, it must be recognized that, in an advanced defense economy, there is even less likelihood than in a war economy that the attitude of the people generally would for long, if at all, be favorable to the success of the controls. In the absence of actual war conditions, they would be less willing to submit to direct controls—whether general rationing, general price control, or partial controls of either variety. Enforcement would be more of a problem than in wartime. There would be even less likelihood than in World War II that agricultural prices could be brought under control. The longer the period of the cold war and the less imminent the threat of actual war, the less effective would be any form of control of wage rates necessitated by general price control.

If, furthermore, the cold war should be a long one and if inflation is suppressed through direct controls, the amount of liquid balances that might accumulate could well become very large indeed. If then war should follow, the existence of these balances would make it all the more difficult to prevent inflation during the more critical period of actual

warfare. To consider, on the other hand, the more cheerful prospect that war might be avoided, these large balances in that event would present the same difficult problem of postemergency adjustment, only perhaps on a more serious scale, that confronted our economy at the close of World War II.

Not only, then, is there a general presumption against the use of price control and rationing, but the case against their use actually appears to be stronger in a cold war than in the case of actual warfare. It is easy enough to conclude that direct controls of this kind therefore should not be employed in an advanced defense economy if they can possibly be avoided. Such a conclusion, however, is hardly satisfactory, since the phrase, "if they can possibly be avoided," begs the main issue: *Can* they possibly be avoided? Part, at least, of the answer to this question must be found in other papers presented at this session. Let me indicate, however, certain situations in which some might take the view that price control or rationing, or both, could not be avoided, but with respect to which I would maintain the contrary view.

First, I would be unwilling to recognize, as appropriate for direct controls, the situation in which it is allegedly easier from the political standpoint to obtain the executive authority to impose price control or rationing than it is to convince legislators of the necessity of raising tax rates high enough, and of authorizing other indirect controls adequate for the control of inflation. After the very effective campaigns that were waged against price control only a few years ago, it is doubtful whether it actually would be easier today to convince Congress of the advantages of price control than to obtain adoption of the preferable program of fiscal and monetary controls. Even if this were not the case, however, the economist is not under the obligation of supporting a program of doubtful wisdom on the basis of political expediency.

Second, there is the situation in which, as the defense program is stepped up, the price system is called upon to facilitate the transfer of resources from the production of civilian goods to the production of war goods. Fortunately, in a cold war this transfer does not have to take place so rapidly as in an economy unexpectedly plunged into actual war. Even in a cold war, however, if the defense program should become a much more important element in our economy, the temptation would be to prevent the very rise in prices of goods important to the defense program that would facilitate the transfer. This relative rise in the prices of goods and services required for the defense program might not in itself be sufficient to effect the required transfer of resources if it were not for the accompanying expectation that the

cold war is likely to be prolonged. In view of the appropriateness of that expectation in the case of an advanced defense economy, the case against the use of price control and rationing is a strong one.

Furthermore, the imposition of price ceilings on products employed both in the military and the civilian sectors would destroy, partly or wholly, the usefulness of the price system as a mechanism for the allocation of that part of these particular resources that would remain for the civilian sector.⁴ It should be anticipated that some rise of prices would occur as a result of the high monetary demand in the military sector and the disinclination of civilian consumers to reduce their consumption until they are priced out of the market. If, however, fiscal and monetary controls are adequately employed, there is no reason to anticipate that the change in the pattern of prices, even though it necessarily would involve a rise in the general level, would constitute the beginning of an inflationary spiral. The situation is one in which the temptation to impose price control should be firmly resisted.

Third, consider the case in which fiscal and monetary policies have been applied so rigorously that there is thought to be a danger that a further increase in taxes might adversely affect production through reducing incentive to produce. Yet an inflationary gap still remains. Rather than further increase taxes, thereby discouraging production, it may be argued that the imposition of price ceilings or of general expenditure rationing will suppress the inflation without adversely affecting production. Those who take this view can point out that our method of financing World War II may well have been responsible for the maintenance of a higher level of incentive both for labor and management than might have prevailed if taxes had been raised to the level necessary to eliminate the inflationary gap. The expectation that hoarded cash and other liquid assets could be freely spent shortly after the war apparently meant that large wartime earnings, even though they could not be spent to the full at the time of receipt, provided a strong incentive for the expansion of enterprise, for overtime work, and for entry into industry of individuals not ordinarily engaged in gainful employment. If these unspent funds had been absorbed by taxation, the effect on incentive might have been serious.

In an advanced defense economy as in a war economy, the real problem, it should be noted, is to maintain at a high level the incentive to produce, while at the same time a large proportion of the product cannot be available as a reward to the civilian sector of the economy for its increased effort. In fact increased production may have to be sought under circumstances of an actually diminished real reward. Now what

⁴Cf. Smithies, *op. cit.*, pp. 363-364; and discussion by Fritz Machlup, *ibid.*, p. 381.

are the means that might be employed, under such circumstances, for maintaining the incentive to produce at a high level? We can appeal to patriotism. We can reward the industrious with assets which might be made convertible into cash some time after the emergency is over. Or we can provide increased current money earnings, knowing full well that they cannot be matched by a corresponding flow of consumption goods while the emergency lasts.

I pass over the possibility that incentive could be maintained by an appeal to patriotism alone. Even in time of war this method would be neither adequate nor fair; in a prolonged cold war it would be of little use.

I pass over also the possibility of providing adequate incentive by the method of bonus payments in assets which would not be negotiable or convertible into liquid form during the emergency. This method lies outside the scope of my paper.

Consider, however, the case in which increased current money earnings are the method employed for maintaining incentive. In this case we may either let inflation take its course, in the expectation that each person will thus be driven to work harder in order to hold his own, or we may impose price control and rationing in the hope of preventing inflation, or we may impose fiscal and monetary controls adequate to reduce spendable incomes to match the flow of available consumption goods. Inflation is obviously not the answer. Price control and rationing are also unsatisfactory, since, as we have seen, people are unlikely to be willing to accumulate large liquid balances in a prolonged cold war and since in any event the remote prospect of being able to make postemergency purchases with these accumulated balances would not offer much incentive, if any, to increased effort. This incentive would be even less than otherwise in the near future because people still clearly recall the way in which the balances they accumulated during World War II were depreciated by the post-war inflation.

There remain fiscal and monetary policies, which are clearly the preferred method of control. Suppose, however, a situation in which if these policies are employed sufficiently rigorously to eliminate an inflationary gap there is danger that incentive to produce will be checked. Is there anything to be gained by permitting some suppressed inflation to develop, relaxing somewhat the level of taxation, and substituting price control and rationing? The answer is clearly in the negative for the reasons indicated earlier. If the balance of disposable income left to civilians by a program of taxation adequate to prevent inflation should not be sufficient to induce maximum effort, it would be no improvement to permit disposable incomes to increase somewhat, with a repression

of the accompanying inflationary tendency. The opportunity to accumulate unspent balances thereby afforded probably would have no favorable incentive effect in a prolonged cold war.

What then is the answer in this case? Probably it is to be found in a different tax structure. The balance of disposable income left to civilians may in the aggregate be sufficiently large to provide the maximum incentive, but it may be wrongly distributed. Redistribution of income through fiscal policy, the employment of taxes in such a way as to avoid penalizing marginal units of effort, and the combination of taxation and subsidies so as to avoid discouraging production would then be the answer.

If, however, the case were one in which, with the best possible distribution of the burden of the defense program and with the best possible distribution of the remainder of disposable income left to civilians, the real income of the latter was insufficient to induce maximum effort, it would have to be concluded that the size of the defense program was excessive. Certainly the answer is not price control or rationing.

A fourth case in which it is likely to be held by some that price control or rationing, or both, would be justifiable is the case in which, in spite of the best possible program of fiscal and monetary controls, inflation develops because of the upward pressure on wage rates under conditions of full employment—because of organized labor's effort to maintain its real income in spite of the reduced flow of civilian goods and services accompanying the defense effort or to use its strong bargaining position to increase its share. There are those who will take the view that, under these circumstances, if the inflationary pressure becomes considerable, the answer is to be found in controls over wage increases, the consent of organized labor to these controls to be obtained by the imposition of price control and rationing.

This is not a problem peculiar either to an advanced defense economy or to wartime. If the level of employment is held high, either because the defense budget is large or for any other reason, the upward movement of wages and prices will be difficult or impossible to prevent by fiscal and monetary policies alone.⁵ Nor, however, are direct controls of wages, prices, and the distribution of goods the answer to this problem. It should be noted that the act of imposing direct controls does not in itself settle the issue as to labor's share of that part of the national income available to civilians. The machinery involved in the administration of wage controls simply provides a medium through which the issue as to labor's share can be settled. Furthermore, unless this issue

⁵ Cf. M. W. Reder, "The Theoretical Problems of a National Wage-Price Policy," *The Canadian Journal of Economics and Political Science*, February, 1948, pp. 46-61; and by the same author, "A Further Comment on Wage-Price Policy," *ibid.*, May, 1949, pp. 206-210.

is settled in a way reasonably satisfactory to the parties directly concerned, the wage controls are not likely to be effective for long; and if the wage controls are not effective, the price controls will also break down.

Essentially what happened in World War II under a system of wage controls was the determination of labor's share of the available product by a process very much like nation-wide collective bargaining, with government as well as organized employers and organized labor engaging in the bargaining process. The direct control of wage rates was a comparatively incidental part of the process. In the absence of dictatorship, the means of checking the wage-price spiral in a full employment economy are likely again to be found in some procedure of collective bargaining between government, employers, and employees; but it is neither necessary nor desirable that price control and rationing be involved in this procedure.⁶

Are there, then, any cases in which it can be anticipated that some use of price control or rationing, or both, might have to be made in an advanced defense economy? I believe that there is one, although it is not a very likely one. There may be others, but I have been unable to anticipate them.

The one case is that of commodities that are important necessities in the budgets of medium- and low-income groups and whose supply is very inelastic. The difficulty in this case is that the distribution of income (and liquid assets) is so unequal even when fiscal policy is adequate that the prices of such scarce necessities may rise so much that medium- and low-income families may be unable to purchase them even in the minimum quantities necessary for the maintenance of morale and efficiency. At the same time, a great increase in the prices of such commodities would have little or no beneficial effect upon their production. The rationing of these goods may therefore be in the interests of efficiency and equity. Furthermore, since the repercussions of high prices for these necessities upon the whole price and wage system may be serious, it may even be defensible to impose price control in these cases. With an adequate program of fiscal and monetary controls and with rationing of these commodities, it is quite unlikely, however, that price control would be required. Other devices could be employed instead of rationing, with or without price control, such as subsidies to low-income families (offset by taxes imposed elsewhere), but there is no reason to presume that such devices would be any less objectionable than direct controls. In any event, it is not likely that,

⁶ A suggested solution to the problem of the wage-price spiral in a full employment economy has been offered by A. P. Lerner, "Money as a Creature of the State," *American Economic Review*, May, 1947, pp. 316-317.

even in the case of war, there would be many commodities that would fall within this category; and it is not anticipated that they would occur at all in a situation short of war.

The conclusion thus seems to stand that not only should price control and rationing not be employed in an advanced defense economy "if they can possibly be avoided," but also, with one exception, the situations in which it may be claimed that they cannot be avoided do not stand up under closer scrutiny. The one case of important necessities the supply of which is very inelastic is highly unlikely to occur in a cold war, particularly if the period involved is a long one. There thus appears to be no good reason for believing that price control and rationing could not be avoided entirely in an advanced defense economy, even though the defense program should come to involve a much higher proportion of our national income than at present.

FISCAL AND MONETARY PROBLEMS IN A HIGH-LEVEL DEFENSE ECONOMY: A STUDY IN TAXABLE CAPACITY

By RICHARD A. MUSGRAVE
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The fiscal and monetary problems of a high-level defense economy will vary, depending on the rate of defense spending and the level of private demand. I have no crystal ball to read on either count, but I must state my premises.

Military expenditures of the Department of Defense, during the current fiscal year, are estimated at 12.3 billion dollars. To this add outlays for the Atlantic Pact program, giving a total of about 14 billion. Present indications are that the fiscal 1950 figure will be similar, or perhaps one billion less; in all, it appears that the defense budget will settle below the 15 billion line.

This, of course, assumes that we halt the deterioration in international affairs. Otherwise, we may soon come to deal with a budget of 150 rather than 45 billion.¹ Things being as they are, this may well come about; yet, I think it unlikely for the early fifties that we shall have a military "peacetime" budget of much above 15 billion. My point is not that a larger budget would promptly cause war (although I have no faith in the proposition that it would prevent war) but that Congress would vote such a budget only under near-to-war conditions; and such conditions, to my mind, would soon end in war. I propose, therefore, to deal primarily with the "optimistic" case of a peacetime military budget of 14 billion, expected to continue for an indefinite period. The pessimistic case of rapid transition to war economy, pointing to an eventual wartime budget of, say, 150 billion, is sadly relevant; but for limitations of time, it will not be considered in detail. The in-between cases, involving sustained military peacetime budgets of from 20 to 40 billion, are interesting but unrealistic.

I

The fiscal policy problem in the "optimistic" case is that of a large peacetime budget. Just how large will depend on the magnitude of non-

¹ Assuming conditions of war economy to arise in, say, 1951, we may expect a gross national product of 350 billion or higher; by 1955 this figure will have risen to about 450 billion. (Data based on assumption of current price level, war production effort about equivalent to World War II, annual productivity increase after 1945 of 3 per cent and no significant on-shore damage.) Assuming real per capita consumption to return to 1945 levels, the product available for war use would be 160 billion; the corresponding figure for 1955 would be about 200 billion.

defense programs. Given a military budget of 14 billion,² and considering the large volume of contractual items already in the budget, there is no possibility—short of drastic cuts in the variable programs—that the total could be reduced to below 40 billion. More realistically, we might set our floor assumption at 42 billion.³ Also, it is likely that in the absence of high-level defense requirements we would have wanted to undertake some expansion of public services along other lines. If such additional programs were added to the large military outlay, we might have a budget total of, say, 50 billion.⁴ The question is whether such budgets are within the economy's taxable capacity.

Taxable Capacity and Size of Budget. The concept of taxable capacity, though central to our problem, is highly ambiguous. While there is a widespread notion that the limits of taxable capacity are reached when the ratio of tax yield to national income rises to 25 per cent, there is no analysis which establishes just this limit. Before attempting to assess the problem implicit in the 42 or 50 billion budget levels, some examination of the concept of taxable capacity is called for.

A country's taxable capacity, evidently, refers to the level of tax rates which the economy can sustain. Thus consider first how this needed level of rates is determined. As a simple rule of compensatory finance we know that the level of rates should be high enough to check inflation and low enough to prevent deflation.⁵ The level of tax rates accordingly will have to be the higher, at any given state of demand, the larger the budget; and it will have to be the higher, for any given size of the budget, the more buoyant the state of demand.⁶ Assuming, first, the state of private demand to be given, at what point will the size of the budget come to exceed the economy's taxable capacity?

² To simplify the argument we assume that the military budget is fixed at 14 billion from the outset. This overlooks the fact that in many cases there is no sharp division between defense and nondefense outlays; also we do not here consider the principle that the size of military expenditures should be determined along with the rest of the budget and with reference to the taxable capacity problem.

³ To arrive at the cash expenditure level of 42 billion, we reduce the 47 billion estimate for fiscal 1950 by 2.5 billion for nonrecurring veteran's dividend payments; by 1.0 billion for lower unemployment insurance payments; by 1 billion for various savings in non-military programs; and by 500 million for reduced payments for Military Aid.

⁴ Such programs might have included about 4 billion additional current payments under expanded social security programs, including health provisions; 2 billion for aid to education; and 2 billion for various developmental projects.

⁵ Some readers will wish to qualify this principle with reference to (a) the problems of a growing public debt, and (b) problems of enforcing efficient budgeting. Discussion of the debt problem, which is extensively dealt with elsewhere, is omitted here. With regard to b it is argued correctly that insistence on tax finance will increase Congressional awareness that public expenditures involve an opportunity cost. We cannot discuss here whether this awareness has to be purchased at a price which might involve the even greater waste of unemployment, or whether other techniques might be developed which would serve the same objective.

⁶ The required level of rates, of course, will also depend upon the extent to which buoyancy is reduced or controlled by nontax measures. See below.

To begin with, let us say that a given level of tax rates stays within the limits of taxable capacity if it does not reduce total real output. In a basic sense, the economy's taxable capacity then depends upon the magnitude of rent incomes. As long as taxation is imposed upon rent income only, it will (by definition) have no effect on the taxpayer's contribution to output. And once income other than rent income is hit, the income-earning activity will cease and no yield will be produced.⁷ In the perfect case, no such incident would occur—taxes would not begin to deter economic activity—until the entire rent income was absorbed in tax yield; but in practice, taxes will begin to collide with non-rent incomes long before the yield has come to equal the total of rent incomes. And this for a number of reasons.

First, we do not know just what incomes, or what part of what incomes, belong to the rent category. Second, our tax instruments are blunt and do not permit us to carve out just these rent components. Third, in determining the tax structure, we are not only concerned with incentive but also with equity consideration; that is, people in essentially similar positions with a similar "ability to pay" should be treated equally. But there is no presumption that rent incomes which can be drawn upon without damage to non-rent incomes involve more "ability to pay" than do rent incomes (of equal size) the taxation of which involves collision with non-rent incomes. Hence there is a conflict between equity and incentive considerations.

Finally, we must recognize the distributional objectives of taxation. Taxation in a democratic society is a proper instrument for orderly adjustments in the distribution of income and wealth. Given a rational process of policy determination, these distributional measures would be undertaken independent of the level of public services and hence would have no bearing on our problem, but this is hardly the case. Due to the imperfections of the political process, taxation is not only an instrument but also an occasion for redistribution;⁸ and distributional objectives may well clash with incentive considerations.⁹ The effective problem of taxable capacity is not how large a fraction of national income can go into public services but how high a degree of income equality is compatible with a well-functioning market economy. For these and other reasons, taxable capacity becomes a matter of degree rather than absolute limit. Disturbances of the production process will

⁷ See A. P. Lerner, *Economics of Control*, Ch. 19. I am also indebted to my colleague, Dr. D. B. Suits, for helpful discussions along these lines.

⁸ If it becomes necessary for reasons of compensatory finance to raise the level of tax rates, this may render it feasible to carry out distributional measures which otherwise could not have been realized.

⁹ They may, but of course they need not. It stands to reason, however, that a policy involving incentive plus distributional considerations will be less desirable on incentive grounds than a policy involving incentive considerations only.

be reached much sooner than the pure case suggests. In analyzing these disturbances, it is convenient to distinguish between taxation effects upon work and upon investment incentives.

As far as work effort is concerned, the effect of hitting non-rent income is fairly clear: The tax will have the same effect as a wage cut applied to such income. Given an upward sloping labor supply curve for the economy as a whole (which implies that we are dealing with earnings which, from the point of view of society as a whole, are non-rent incomes), the tax will reduce the amount of work forthcoming.¹⁰ Moreover, the increased supply of civilian public services available free of direct charge—like an improvement in the weather—raises living conditions available without work; assuming declining income utility and/or increasing work disutility, the result will be a drop in the labor supply schedule and a further reduction in work effort. In other words, the number of hours worked which mark the point of “no voluntary unemployment” will decline. Toynbee notwithstanding, this need not be undesirable on welfare grounds, but it may be harmful in a defense economy where high production as such adds to the war potential.

The case is more complex with regard to investment incentives. Higher taxes may reduce investment because they reduce the rate of return on risk-taking and hence curtail the investment of available funds; or because they infringe upon “finance”; i.e., raise the liquidity preference behind the average dollar of savings and thus reduce the supply of funds available for investment. But in neither case does the resulting reduction in investment create a problem for inflation control. Since taxes are raised for the express purpose of reducing private expenditure, tax deterrents to spending for investment (or consumption) are just what is wanted. Looked at in real terms, any increase in the public use of resources obviously requires curtailment in the sum total of private production of consumer plus capital goods. And postulating price level stability, a similar curtailment of total consumption plus investment expenditures is called for.

If public policy is indifferent to the ratio of private consumption to capital formation, this is all that need be said. Should investment be depressed too much, so as to render total demand deficient, this is evidence that there has been a policy error and tax rates will have to be cut. But public policy can hardly afford to be indifferent to the division of private output between consumption and capital formation.¹¹ The

¹⁰ The opposite would result if the labor supply curve were backward sloping. Some considerations suggest that increasing wealth will lead in this direction and hence extend the limits of taxable capacity, but others point in the opposite direction.

¹¹ I am not here concerned with the bearing of capital formation on employment. Throughout we assume that high employment is maintained by adjusting the level of tax rates and by other means.

rate of capital formation is one of the factors which bears on economic growth and hence of special importance to the defense economy. Public policy, therefore, is not only confronted with a large budget but also with the requirement of a high rate of capital formation; and where this is the case, the tax structure will have to be adjusted accordingly. The higher the desired level of capital formation is, the more largely must taxes be designed to reduce consumption rather than investment. If the conventional taxation techniques are used, this is likely to aggravate the tax deterrents to work incentive arising at any given budget level; a high rate of capital formation may have to be purchased at the cost of increased damage to work effort. Or if the budget is increased, concessions may have to be made with regard to capital formation.¹²

Relation of Taxable Capacity to Buoyancy of Demand. So far we have seen that the severity of incentive effects will increase with the size of the budget. Now let us take the size of the budget as given and consider the significance of changes in the level of private demand. If the state of private demand becomes more buoyant, due to an increased desire to consume or to invest, tax rates must be raised in order to hold private expenditures at the old level. The situation is the same in this respect as if the budget had been increased; but the incentive implications will differ. Suppose we start from equilibrium, where we have neither inflation nor deflation and capital formation is at the desired level. Assume now that conditions become more buoyant (*a*) due to an upward shift in the marginal efficiency of investment schedule, (*b*) due to a decline in liquidity preference, and (*c*) due to a rise in the consumption function.

In cases *a* and *b*, tax rates will have to be adjusted so as to prevent capital formation from increasing and from absorbing an undue share

¹² The basic difficulty with regard to investment is that of finance rather than of reduction in the rate of capital return. The latter effects may be avoided, to a large measure, by properly defining taxable net income. By providing for liberal loss treatment, shortened depreciation periods, etc., the income tax may be designed so as to leave the return on risk-taking unchanged. (See Domar-Musgrave, "Proportional Income Taxation and Risk Taking," *Quarterly Journal of Economics*, May, 1944.) And capital income for other than risk-taking being largely in the nature of rent income, taxation effects on the investment of available funds are thus neutralized.

The finance aspect is more difficult to handle. Taxes do not only reduce the level of saving but they also affect the composition of savings: They may leave more in the hands of savers with relatively high or with relatively low liquidity preference. This must be distinguished from the adequacy of aggregate savings—in the sense of consumption being sufficiently low to permit the desired capital formation without inflation—which are quite a different matter; if consumption is too high, it should simply be cut down.

It may be argued that the problem of "finance" (the danger that, at a desired level of income, investment would be inadequate even though planned consumption would not be excessive) may be solved by increasing the money supply or by making equity capital available through public channels (e.g., the RFC). But banks are not the proper source of equity capital and the RFC approach on a large scale is an approach to public rather than private enterprise.

of the resources available for private use. This may be done by increasing the rate of tax applicable to investment income, thereby returning the efficiency of investment schedule net of tax to its old level. Or it may be done by adjusting the tax burden in favor of savers whose liquidity preference is relatively high and against savers whose liquidity preference is low, thereby keeping "average" liquidity preference at its old position. In either case, investment is thus prevented from rising above its proper level. While tax rates applicable to investment income, or to investment-bound savings, have to be raised, there is no need to worry that such higher rates will depress investment unduly; they are merely imposed in order to keep investment down to its proper level. Nor will there have to result any additional strain on work incentives, unless the tax adjustment is permitted to spill over into earned incomes.¹³

If the cause of increased buoyancy has been an upward shift in the consumption function, as in case *c*, the additional tax pressure will have to be directed primarily against consumption. Unless there are as yet untaxed rent incomes which can be drawn upon without hitting work incomes of a non-rent kind, the result will be a further decline in work effort. Since there is no reason to assume that the upward shift in the consumption function will be accompanied by a similar shift in the labor supply schedule, it follows that the conditions of consumption boom (similar to an increase in the budget) will accentuate tax pressures on work incentives.

In short, if the required level of tax rates rises, the incentive implications will be different, depending upon whether the higher requirement is due to budget expansion, a rise in the consumption function, or an investment boom. In the latter case the incentive problem need not be aggravated; in the former cases it is likely to become more severe.¹⁴

High Interest Rates Versus High Tax Rates. We have assumed so far that the burden of inflation control rests with taxation. It now remains to be seen whether monetary restriction might not serve to ease the incentive problem created by a large budget.

Let us begin with a situation where things are as they should be; i.e., taxes are high enough to check inflation and capital formation is up to the socially desired level, but not higher. Now suppose that we want to rely more heavily upon credit restriction and less heavily upon the tax-

¹³ This may be the case if the adjustment is aimed to reduce the supply of investment-bound savings. The result will depend on the elasticity of labor supply on the part of savers who are taxed more heavily (whose liquidity preference is relatively low) as compared to that of savers who are taxed less heavily (whose liquidity preference is relatively high).

¹⁴ There is also the possibility that tax deterrents will be balanced, or more than offset, by favorable effects of public expenditures. These may open new investment opportunities and increase labor productivity, thus offsetting the effects of reduced work effort.

tion approach. Capital formation being at its proper level, the total amount of investment or consumption is not to be changed.

However, we may reduce the rate of taxation applicable to investment income, thus shifting the efficiency of investment schedule (after tax) to the right. At the same time we may restrict credit, thus lowering the supply of funds. As a result, the rate of interest rises and the amount of investment will be unchanged. A lower degree of liquidity has been substituted for a higher rate of taxation on capital returns. Unless the tax adjustment carries with it cuts in the taxation of earned incomes, for which there is no particular reason, it seems unlikely that the untaxing of capital returns or the rise in the rate of interest will have significant effects on work effort. As a theoretical proposition, and apart from questions of political feasibility, either approach will do. On incentive grounds there appears to be little preference between them.

The two approaches, however, differ significantly with regard to their distributional aspects. If the rate of taxation on capital income is reduced while total investment (and the gross rate of return on capital) remains constant, it follows that the total profit (interest plus risk) income after tax will be increased. The credit restriction approach is more favorable to lenders and investors as a group than is the taxation approach. The fact that higher taxation may be an occasion for redistributional measures adds to this view.

II

Let us now leave the theoretical aspects and turn to the levels of taxation required by our hypothetical budgets of 42 and 50 billion. How severe are the incentive effects incurred at these levels of rates? This, of course, is largely a matter of judgment; and for lack of time I shall have to present my views on the matter in a somewhat dogmatic form.

Application to Budget of 42 Billion Dollars. Suppose we have a situation, which may be called buoyant, where the 42 billion budget calls for balance; i.e., the level of yield provided by the present revenue structure.¹⁵ This revenue structure involves a first bracket income tax rate of 16.6 per cent—a rate which does not cause concern over work effort at the lower end of the scale. As for earned incomes in the upper brackets, marginal rates are, of course, much higher. A bracket rate of 66 per cent might be enough to make the 100,000 (or, if single, 50,000)

¹⁵ All these yields refer to a "high employment" level of income (under present conditions a GNP of about 250 billion) as this is the income which we try to maintain. The yield levels mentioned above are not designed to give accurate income models; they are merely to serve as bench marks for discussion purposes. As will be seen below, the required yields depend also on the kind of taxes used.

dollar a year lawyer turn down that last case; a 70 per cent rate might induce the 120,000 (or, if single, 60,000) dollar a year executive to show less enterprise; or due to the peak rate, we might be deprived of a Shirley Temple picture.

Where this interferes with economic efficiency and defense needs, some adjustment in the taxation of high-bracket earned incomes is called for. Yieldwise, this is hardly a major problem; limiting the bracket rate on earned income to a top of 55 per cent, for instance, might involve a yield cost of 150 million; and in the total yield picture, this is a rather small amount. I do not believe that such a blanket adjustment should be made now, and I am not proposing it here. One of the unfortunate aspects of our income tax is that, due to income splitting, favored treatment of capital gains, and other distorting devices, upper bracket rates look very much steeper than they are. Before adjustment of rates applicable to high-bracket earned incomes is considered, all sham progression should be cut out and be replaced by an honest-to-goodness rate schedule that really applies; then some selective adjustments in high-bracket rates on earned incomes may be called for. Whatever is done about this, the work incentive problem seems quite manageable at the 42 billion yield level.

Nor does the situation seem disquieting with regard to investment, especially where defense industries proper are concerned. Since the government purchases a substantial part of their output, investment in such industries involves relatively little risk and hence high tax rates are of relatively little importance. By adjusting price, contract and renegotiation policies, and, if need be, by supplying the necessary financing, the government can and will assure an adequate defense plant.

Moreover, there is no evidence of serious pressure in nondefense (though potentially defense-important) industries. Capital formation since the war has hardly been below a socially desirable level; it has moved at a record rate and the supply of equity capital (including retained earnings) has been quite sufficient. But even though the tax structure may be fairly adequate at this time to check inflation and to maintain the desired capital formation, conditions may change. And even in the present setting there remains much room for improvement. Tax reform by substitution is less fun than tax reform by elimination (which we tax planners of 1945 had so fondly dreamed of), but it is more important.

For equity, if not for incentive, reasons, some attention will have to be given to the integration of the personal and corporation income tax. We shall have to decide whether we want an "absolute" corporation tax, and if so how high it should be. The rest should then be integrated

with the shareholder's personal income tax. As to integration methods, I think there are good reasons for preferring the dividend-paid-credit method to the British technique.¹⁶ Whether to retain an absolute corporation tax is a more difficult problem. My own view is that some such tax on large corporations should be retained. This is based on the proposition, which I think reasonable, that taxes drawn from the profits of large corporations are less likely to deter investment than taxes drawn from other profit income.¹⁷

If conditions are less buoyant than initially assumed, the required yield will be less. Should the decline be in investment buoyancy, maintenance of capital formation at the former level will require a tax adjustment which restores the previously prevailing conditions of liquidity structure or investment efficiency net of tax. Where the decline in buoyancy is due to a drop in the consumption function, taxes will have to be reduced so as to release consumption funds. The amount of deficit which will be required will depend upon the particular situation; most likely, it will be larger in the case of the consumption slump. And as we have seen, the downward adjustment of rates in this case should also relieve pressures on work incentives.

Application to Budget of 50 Billion Dollars. Suppose now that additional public programs of 8 billion dollars were introduced, giving a budget total of 50 billion. Beginning again with a buoyant setting, the level of tax rates will have to be raised considerably above the 42 billion required for the smaller budget. Unless capital formation is permitted to fall, the resources needed to provide the additional public services must be drawn from consumption. That is to say, the tax adjustment will have to be such as to depress consumption expenditures by 8 billion.¹⁸ The increase in yield required to do this will depend upon the taxes used. Assuming reliance on conventional taxation techniques, the required increase in yield, most likely will exceed 8 billion. Let us suppose that it is 10 billion. Suppose that 3 billion of this additional yield was provided by pay roll taxes, 2 billion by excises, and 5 billion

¹⁶ The main reason, perhaps, is that the former method excludes the possibility that some part of the tax may be shifted and then be rebated as a credit to the shareholder. Where no tax is collected from the corporation, no tax can be shifted.

¹⁷ See R. A. Musgrave, *National Tax Association Proceedings*, 1947, pp. 111-120.

¹⁸ This formulation applies to the case of exhaustive public expenditures. To the extent that the additional program is in transfers, the problem will be to reduce consumption expenditures of others by the same amount as the consumption expenditures of the transfer recipients rise.

If it could be assumed that transfer receipts are considered wage increases, just as taxes are considered wage cuts, the effects on work incentives might cancel out. But transfer payments are not typically of this kind; they are likely to be given without relation to the recipient's income or expenditures. Hence it is misleading to dispose of the transfer problem as "negative taxes." On incentive grounds there remains a quite significant difference between the two; they do not cancel.

by additions to the personal income tax.¹⁹ What will be the effects upon work incentives?

Pay roll taxes are a special case. To the extent that they are considered a wholly voluntary insurance payment, they should be neutral.²⁰ But this type of reaction will apply, if at all, to the employee contribution only. The employer contribution is a tax on wage income, or else it will be reflected in prices like an excise.

The comparative incentive effects of excises versus income taxes offer intriguing problems. If the wage earner operates under a money illusion, he may be less concerned about a decline in real income (excise) than about a decline in take-home pay (income tax). Also, the excise may go by unnoticed, whereas the income tax may call forth a "spite reaction." The taxpayer-wage earner may react more violently to a rise in income tax than to a decline in take-home pay due to an actual wage cut. This spite reaction ("I don't like the government; hence I will forego additional income after tax rather than let the government get more taxes from me.") may again be less pronounced under the indirect tax approach.²¹

A 5 billion addition to income tax yield, requiring an increase in average bracket rates by nearly one third, raises considerable difficulties. While I think it unlikely that a first bracket rate of 25 per cent would have significant long-run effects on absenteeism or reduced efficiency, such reactions may occur at the outset. Consideration might be given to breaking up of the first bracket rate, in order to permit starting at a lower rate with more rapid rise thereafter. A one-third increase in rates applicable to the higher brackets would be more serious and could not be carried across the board. Subject to the previously mentioned reservations, some earned income credit arrangement at the upper end might be called for. Also, consideration need be given to other techniques, such as the expenditure tax, which avoid some of the difficulties inherent in the traditional tax instruments.²²

¹⁹ An increase in corporation income tax would not lower consumption except through its effects upon dividends (which could be taken care of through the personal income tax) or through higher prices, which would be inferior to a selective excise or spendings tax approach.

²⁰ To the extent that terms of public insurance are superior to those previously available, they may even imply a rise in real wages.

²¹ The above compares the effects on any one person of an equal amount paid by way of excise or income taxes. Actually, though not necessarily (if, for instance, a progressive sales tax with exemptions is considered), the distribution of the tax burden is likely to differ under the two approaches. Also, we do not consider here that for equal payments the resulting loss of welfare is likely to be greater under the indirect tax. All this also enters into the final choice between the two tax sources. See also footnote 22.

²² The use of an expenditure tax to hold down consumption expenditures will interfere less with work incentives because being forced to postpone the use of income is not as bad (and hence the implied wage cut not as great) as having to pay an outright income tax. However, this assumes an expectation that such taxes will be reduced at some later time. These considerations also apply to excises; but as distinct from excises, the expenditure tax permits a progressive burden distribution to be applied.

On the investment side, the higher rates make it the more necessary to properly define net income. If this is done, the additional yield may be distributed more progressively without depressing the investment of available funds below the desired level. This, however, does not take care of effects upon the outside supply of equity capital. As noted before, the difficulty is not so much one of economic policy as of possible conflict between distributional and incentive objectives. The use of less orthodox techniques of taxation, e.g., favorable treatment of funds made available for equity investment, may again help. But the more exemptions of this kind are granted, the more conflict is there with the basic equity rule that people with equal incomes should pay an equal tax.²³

Conclusions. These divergent considerations do not lend themselves to simple summation, but it is my feeling that, given a sensible tax policy, the level of rates required to sustain the 42 billion budget is well within the economy's taxable capacity. The level of rates required to sustain the larger budget raises more serious problems (with regard to higher bracket earned incomes and outside supply of equity capital), but these as well should be manageable. While the resulting incentive effects will tend to be less severe under depressed than under buoyant conditions, the general conclusion holds for either case.

We have suggested above that in the absence of high-level defense requirements the Congress might have wished to expand nonmilitary public services by 8 billion. In view of the high-level defense requirements which must be met first, this program must be curtailed (a) because less resources are available for nondefense use²⁴ and (b) because the margin of unutilized taxable capacity is narrowed down. Suppose that the 8 billion program were to be cut for these reasons by 2 billion, leaving an addition of 6 and a total budget of 48 billion. The case for or against such a residual program would then have to be judged on the basis of its intrinsic usefulness; it could not be rejected on the general grounds that all other plans must be postponed until peace breaks out in some indefinite future.

²³ If conditions are less buoyant or depressed, the problem is again simplified as our preceding discussion has shown.

²⁴ It does not follow that the cutbacks need be wholly or even largely in other public uses. Depending upon the community's preferences, high-level defense needs may simply call for a rise in the over-all budget and a reduction of resources available for private use. Also, the result will depend upon the extent to which these nondefense programs would compete with defense for essential resources.

Thus there will be less reason to curtail transfer programs which merely redistribute rather similar consumer outlays between different households than to reduce public construction programs which involve heavy steel demands. However, the favored position of transfer programs does not apply with regard to taxable capacity consideration; if limitations are imposed upon the over-all size of the budget because tax rates should not be raised above a certain level, the resulting limitations apply to transfer as well as to exhaustive expenditures. See also note 16.

This reasoning is based on the assumption that the 14 billion military budget is a long-run prospect. If the issue were merely one of postponing essential public services for a brief period, the situation would differ. Also, there is the probability that the prolonged existence of a high-level defense economy—involving as it does governmental research expenditures of several billions a year—will result in a rate of technological progress and hence rising national income, taxable capacity, and ability to provide public services much above what would have been realized otherwise.²⁵ This, to be sure, is a sad comment on the state of our civilization; but such few benefits as may result from the grim international setting we may as well enjoy while they last.

III

In concluding, let us turn briefly to the case of actual transition to war economy. Military expenditures would then increase at a rapid rate, held in check only by the time factor involved in conversion and in setting the military machine in motion. In the process, there arise numerous problems of timing; e.g., the rate at which taxes are raised or direct controls are introduced. Much depends upon the degree of inflation which one desires to permit as oil to the conversion process, but the basic limitations will be political. The needed legislation is not obtainable until the emergency occurs; and as a result, inflation in the early transition stages is hardly avoidable.

There is, however, one area in which pre-emergency policy may have quite decisive bearing on wartime and even postwar policy. This is in debt management. If we should get into another war, reintroduction of the Revenue Act of 1945 might leave us with an annual addition to the public debt of, say, 90 billion.²⁶ Suppose we imposed a more severe tax system and managed to hold the annual increase in debt to 70 billion; in less than four years the present level of debt would then be doubled. However heroic the tax effort, deficit financing would be on a large scale; and proper debt policy would be the most important phase of war finance.

Barring debt repudiation by inflation, the debt-to-national income ratio would rise substantially by the end of the war. Our liquidity worries, therefore, would reappear on a greatly enlarged scale unless the debt were placed in such a way as would permit control over its monetization in the postwar period. This would have to be the focus of

²⁵ I am indebted to Mr. Kenneth B. Williams for this suggestion.

²⁶ The Revenue Act of 1944, at a GNP of 360 billion (the GNP assumed for a hypothetical wartime economy in 1951) would yield cash receipts of about 90 billion. Assuming total cash expenditures of 180 billion (see footnote 1) this would leave a deficit of 90 billion.

wartime debt policy and might require financing techniques rather different from those employed in World War II. Moreover, the likely structure of financing in the case of a war emergency should be kept in mind in designing current refunding policies.²⁷ The main suggestion here is that new marketable long-term bonds should not be issued and that such long-term bonds as have been withdrawn from the market by the Federal Reserve should not be resold.

Since the inflation problem has abated for the time being and security prices have been rising rather than falling, there is no immediate hurry for monetary legislation which will permit pursuit of restrictive credit control policies without endangering the public debt structure; but there can be no question, in the case of war, that some variant of the secondary (security) reserve plan would be a minimum requirement. With regard to banks, as with regard to other investors, it would be imperative to design war financing so as to assure control over debt monetization in the postwar period.

²⁷ See my paper in symposium on "How to Manage the Public Debt," *Review of Economic Statistics*, February, 1949, pp. 25-29.

LABOR PROBLEMS OF A DEFENSE ECONOMY

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This paper was probably supposed to deal with the following question: What problems in the supply and pricing of labor may be expected to arise from maintenance of military and foreign aid expenditures at the present level or moderately higher levels? If I confined myself to this question, however, the paper would be very brief indeed. Present levels of military expenditure do not, I believe, involve any labor problems beyond those which would be with us in any event; nor are these problems at all serious compared with the problems of procurement, pricing, and fiscal policy which have been discussed in the preceding papers. In order to say anything at all, therefore, I shall have to shift the main focus of the discussion to a different question: To what extent can the labor problems which arise during a war be anticipated and prepared for in a peacetime economy?

I

It may be desirable at the beginning to explain why I do not regard present or prospective military expenditures as creating important labor problems. The first reason is that our peacetime economy has great reserves of unused labor capacity. During World War II we removed more than ten million able-bodied men from the labor force, produced great quantities of war material, and still maintained civilian consumption at close to the prewar level. This was accomplished by drawing into the labor force some people who would not normally have been employed; by reducing unemployment to about 1 per cent of the labor force at the peak of war activity; by lengthening the work week 20 to 25 per cent; and by shifting people from occupations in which their productivity was low to occupations in which it was higher—for example, from agriculture to manufacturing. While our unused labor capacity is less today than in 1940, particularly as regards unemployment, it is still sufficiently large that we have no reason to fear an overall shortage of labor.

Even with no shortage in aggregate labor supply, it is still conceivable that we might have serious bottlenecks in particular occupations. Again, however, I see no likelihood of this happening at present levels of military expenditure. The training time for most occupations in modern industry is remarkably short and is becoming even shorter with the progress of mechanical improvements. There is some tendency for both labor and management to overstate the amount of training re-

quired for specific jobs. When the pressure is really on, however, it turns out that the job which supposedly took six months to learn can be learned reasonably well in two weeks.

During World War II, training of labor usually kept well ahead of production requirements. There were cases in which a machine had to stand idle for lack of someone to run it; but there were many more cases in which workers had to stand idle after completion of a training course because of a lack of vacant jobs. The most serious labor shortages—for example, in foundry work—did not arise from training difficulties but from unpleasant conditions of work. At a time of abundant job opportunities, it was difficult to “sell” workers on jobs which were heavy, hot, dangerous, and generally unpleasant.

Turning from supplies to prices, I foresee no special difficulties in the pricing of particular types of labor relative to each other. If military demands piled on top of other demands produce a shortage of some basic material, the price of the material may rise sharply regardless of the movement of other prices in the economy. A shortage of machinists or welders, however, will not produce nearly so marked a divergence between the movement of their wage rates and those of other workers. The main reason is that most occupations have a very short training time as has already been noted, so that, given a short adaptation period, the supply of labor to the occupation becomes infinitely elastic. There are two other factors in the situation. The internal politics of the labor movement, as I have argued elsewhere,¹ makes for rough conformity to an average rate of wage increase rather than for each industrial or occupational group pushing wages up at the maximum rate possible in the short run. Moreover, use of the “prevailing rate” concept both in public contracts and in government’s own wage policies tends to prevent a marked divergence of public and private wage rates.

A more serious danger is that, if both private investment and military expenditures continue at a high level and if Congress continues unwilling to check inflation by budget surpluses, the general level of wages and prices may rise too rapidly over the long run. I do not wish to get into a discussion of this problem for two reasons. First, I believe that the inflationary threat has been considerably exaggerated in recent years. I do not expect that upward pressure on wage levels will be nearly so severe during the fifties as it was from 1941 to 1948 (and, for that matter, from 1917 to 1920). One should not generalize from experience during periods of war and postwar inflation.

Second, if the wage level does tend to rise too fast, I see little likelihood of any direct countermeasures by government. Despite much

¹ See my paper on “Wage Bargaining, Price Changes and Employment” in the first annual proceedings of the Industrial Relations Research Association, 1949.

talk about "national wage policy," we lack institutional mechanisms by which government can directly influence the course of wages; and to speak of policy in the absence of any technique for effectuating it does not make much sense. I expect that we shall have in future about what we have had in recent years; viz., sporadic government intervention in strike situations which threaten to tie up large sectors of the economy. The overriding objective in such cases, however, will be to get the dispute settled on whatever terms the parties will accept rather than to apply any standards of desirable wage determination. The only effective anti-inflation measures open to government are measures of monetary and fiscal policy and these can probably reduce the rate of inflation only at the expense of a lower level of employment.

II

Let me turn now to the question of how far one can prepare in peacetime to meet the labor problems which arise in the event of war. Preparation can mean either the drawing up of paper plans and programs or—much more effective—the building into the peacetime economy of institutions serviceable also in wartime. Let us look first at what can be done in the latter respect.

I suggest that much the most important thing which can be done is to strengthen the state employment services. You will recall that during World War II the employment services were "borrowed" by the federal government and formed the principal operating arm of the War Manpower Commission. The employment service office in each locality was the main agency for funneling available labor supplies into essential industries. It canvassed the labor requirements of employers in the area and tried to project requirements some months into the future. It conducted campaigns to induce additional people to register for full-time or part-time work. It screened applicants for employment and referred them to jobs in war industries. When labor shortages in some localities became sufficiently acute to require controls over hiring, these controls—though framed in general outline at the national level—were administered in the local employment offices and depended for their effectiveness on the quality of local administration.

An effective public employment service, therefore, is the cornerstone of any labor mobilization program. Moreover, there is no conflict between immediate economic efficiency and long-range preparedness; for an effective employment service is a very useful institution in the peacetime labor market. It would not be appropriate here to enter on a detailed discussion of what is needed for effective employment service operations. Some of the requirements are: salary levels adequate to recruit and hold a capable staff in competition with opportunities in

private industry; a large enough staff so that, in addition to the necessary work of registering and referring workers, considerable time can be spent in visiting plants, getting firsthand information on job specifications and hiring requirements, and explaining to employers what the service can do to help them; and enough insulation from unemployment compensation operations so that placement work is not snowed under by the task of paying claims. The attitude of employers toward the public employment service is much better than it was a decade ago, and the proportion of vacancies filled through the service is materially higher. In order for the service to make its maximum contribution to efficient labor market organization, however, the percentage of vacancies filled through it should probably be two or three times what it now is—say, something like 50 per cent.

Progress in this direction depends mainly on inducing employers to make more and more use of the service. The way in which workers seek jobs is largely determined by employers' hiring practices. As long as employers continue to hire mainly "at the gate," workers will continue to seek work by direct application rather than through the employment service. Nor will employer behavior be influenced very much by sheer exhortation. Increasing employer use of the service will be obtained mainly by sustained high-quality performance, by repeated demonstrations that the service really can "deliver the goods."

I suggest, secondly, that we need to increase our knowledge about the nature and determinants of labor mobility. We know in a general way that the labor force is quite dynamic—that there is much shifting among employers, occupations, industries, and geographical areas. We know relatively little, however, about the detailed patterns of labor mobility and the factors responsible for them. How much of each type of movement is there? To what extent is one type of movement accompanied by other types—occupational shifting by intercompany shifting, geographical movement by interindustry shifts, and so on? How are the patterns of movement affected by changes in the level of employment and other economic factors? What are the personal characteristics of those who move—are the important factors age, sex, occupational training, temperamental characteristics, or what not? What are the main inducements and obstacles to each kind of movement? What are the channels through which job information is obtained and the desire to move made effective?

Systematic investigation of these questions is already under way in a few universities, but the work needs to be enlarged and intensified. A full understanding of labor mobility would, I believe, be a great step toward more effective organization of the peacetime labor market. It would also be relevant to the problems of wartime labor mobilization.

For while war brings pressures and incentives not operative in peacetime, all of the peacetime incentives and obstacles to movement continue in operation as well. Workers still have minimum standards of what constitutes an acceptable job; they still respond somewhat to monetary incentives; they are still concerned with seniority and protecting their long-run position; they still dislike geographical movement if there is any way of avoiding it; and so on.

It is necessary to understand these motivations. Wartime direction of workers to jobs, even when the government has compulsory powers, must in practice be carried out with "the consent of the governed." The wartime experience of Britain and other democratic countries indicates that compulsion must be kept in reserve as a last resort for unusual cases. If many workers actually have to be directed to jobs which they do not want, the system is in danger of breaking down. The problem is to create a structure of incentives which will induce workers voluntarily to move to the places where they are most needed. I suggest that the worker motivations operating in wartime are basically the same as those operating at other times, and that they must be understood if labor supplies are to be mobilized with maximum speed and minimum friction and discontent.

III

A word, finally, about problems on which advance action cannot be taken but which are nevertheless important matters for study and discussion. A full discussion of wartime labor mobilization would be inappropriate in this paper. It seems worth while, however, to mention the major planning problems and a few of the issues which they raise. The experience of World War II is still vivid in the minds of many of us, and it is possible now to get a sense of relative importance which will be much more difficult a decade hence.

There is first the question, warmly debated during 1942 and 1943, whether it is desirable to give the labor supply agency statutory authority to direct civilians into essential war occupations. This was not done during World War II, due partly to strong opposition by both trade unions and employer organizations. We relied throughout the war on a variety of indirect pressures: the ordinary financial inducement of high earnings on war jobs; deferment of key workers in war production from military service; appeals to patriotism; and, in the later stages of the war, in localities where labor was particularly scarce, on hiring controls issued under the general war powers of the President.² These techniques sufficed to get us through the war with few

² The main controls used were: (1) a requirement that a worker wishing to leave a job in an essential industry must obtain a "certificate of availability" from his employer in

serious holdups of production; but this was due mainly to the huge labor reserves with which we entered the war rather than to the intrinsic effectiveness of the techniques. If the war had lasted longer, if the production peak had been considerably higher, it would have become increasingly necessary to substitute direct labor market controls for indirect pressures and inducements.

We should assume that any future war will involve a larger production effort, greater labor requirements for both industrial and military purposes, and, therefore, a more extensive system of labor market controls than was necessary in World War II. A strong case can be made that these controls should be exercised under clear statutory authority, details of which have been studied and discussed in advance by labor and management representatives, rather than under *ad hoc* administrative orders issued in the stress of emergency. There is a natural tendency to think of national service legislation as a "draft of labor"—a method of exerting additional direct pressure on the individual. This conception is entirely wrong. The purpose of a labor mobilization system is rather to limit and rearrange the alternatives open to the individual so that, while he still has latitude for choice among necessary occupations, he is not free entirely to disregard the needs of the war economy. If the system is properly constructed and administered, it should rarely be necessary for the authorities to tell a worker what job he should take or to enforce sanctions for noncompliance. National service legislation is thus likely to mean less rather than more direct compulsion on individuals; and what compulsion is exercised will be well considered, consistent, and safeguarded by the right of appeal to higher authorities. These generalizations seem to be supported by the experience of Britain, Canada, and other democratic countries which operated under national service legislation during World War II.

A second planning problem is how best to co-ordinate the recruitment of people for war production with the recruitment of people for military service. It seems clear in principle that the problem of securing the best allocation of manpower between civilian and military uses is one and indivisible, and that the draft system should be part of an over-

order to be eligible for hiring by any other employer in an essential industry; the conditions warranting issuance of a certificate were specified, and disputes over whether a worker was entitled to a certificate were refereed by local officials of the War Manpower Commission; (2) a requirement that specified categories of workers must seek work only through the public employment service, which by a system of priority ratings attempted to refer workers first to the most essential war jobs; (3) imposition of "employment ceilings" on employers in nonessential industries, in order to curtail their use of labor and make more people available for war production. These ceilings were rarely set low enough to force labor out of nonessential industries; their usual effect was simply to prevent an expansion of employment which might otherwise have occurred.

For a fuller discussion of these and other control devices, see Bureau of the Budget, *The United States at War* (Washington: Government Printing Office, 1947), Chs. 7 and 14.

all manpower organization. During World War II, however, this principle was never successfully established, and the Selective Service System succeeded in maintaining an independent existence and going its own way. Selective Service, manned by Army and Navy officers, regarded itself as mainly an agency to procure manpower for the armed forces. While it conceded the principle that the needs of industry must be taken into account, these needs were interpreted by Selective Service officials. Liaison was maintained with the War Manpower Commission, but the relation was one of sovereign powers. The manpower program was thus bifurcated all the way from the Washington level down to the local areas, in which Selective Service boards and employment service offices operated independently and in some cases at cross purposes. Moreover, the 6,500 local Selective Service boards were so largely autonomous in their operation that it was difficult to get much consistency of policy even within the Selective Service System.

This arrangement worked, in the sense that the armed forces were manned and industry did not break down; but this was due not to the excellence of the system but to the fact that our labor reserves were not seriously strained even at the height of the war. It can scarcely be claimed that it produced the best allocation of people between military and civilian life: many doubtless remained in industry and agriculture who would have been more useful in the armed services and many were inducted into the services who would have been more useful in civilian jobs.³ Moreover, it perpetuated an unfortunate cleavage between the reputations attracting to the two types of service. Military service continued to command special prestige, while deferment for occupational reasons continued to bear the stigma of "draft-dodging." Selective Service was dramatized as the agency which was winning the war by funneling men into military service; the War Manpower Commission's efforts to protect key jobs in war production were sometimes made to appear as a drag on the military effort. These difficulties could not have been entirely avoided, but they could certainly have been mitigated by a unified manpower administration.

³In fairness to Selective Service officials, it should be noted that some of the most egregious wastes of manpower were imposed on them by Congressional action. The outstanding example was a November, 1942, amendment to the Selective Service Act which, in effect, gave a blanket deferment to all men engaged in agriculture. By September 1, 1943, more than 2 million agricultural workers had been given occupational deferments, compared with 1½ million in all other industries. Occupational deferments amounted at this time to 47 per cent of the number of men aged eighteen to forty-four who were in the agricultural labor force in 1940; the corresponding percentage for nonagricultural workers was only 7 per cent. Congressional pressure was also partly responsible for the Selective Service System's emphasis on dependency status rather than occupational essentiality as the main criterion for deferment. Local boards tended to draft men without children and defer men with children, regardless of the occupations in which the men were engaged. See in this connection Bureau of the Budget, *op. cit.*, pp. 445-449.

Some might add to this list of planning problems the question of techniques for preventing work stoppages due to labor disputes. In actuality, however, this problem is much less acute in wartime than in peacetime. It was easy, both in World War I and World War II, to get labor and management representatives to agree to avoid work stoppages for the duration of the war and, despite a few notable lapses, these agreements were remarkably well observed. Such an agreement requires, of course, that unsettled disputes be submitted to a public agency. It may be said, therefore, that one must plan the structure of this agency and the general principles by which disputes should be settled. I am inclined to think, however, that this sort of planning would be academic and not very helpful. It will probably be necessary for any future war labor board to do essentially what the National War Labor Board did in World War II; viz., to hammer out a body of principles in the course of adjudicating particular disputes, avoiding a priori judgments as much as possible, and taking into account the attitudes, interests, and relative strength of the parties. The War Labor Board's "rules of the game" as they stood in 1945 could not have been visualized in 1940 by any possible effort of the imagination, nor would union and management officials have been willing to accept them at that time. They were "sold" to the parties gradually over a period of years and under the necessity of settling particular disputes. The settlement of industrial disputes, in short, does not lend itself to advance planning in nearly the same degree as does mobilization and allocation of labor supplies. The principles to be applied must be evolved by a "common law" process in the light of actual industrial relations practices at the time.

I would like to add, in conclusion, that some of the most important planning problems in connection with labor supply do not appear to be "labor problems" at all. An example is the problem of providing additional housing facilities for workers migrating to congested production centers, adequate transportation from home to work, and other community services. As has already been emphasized, workers must be gotten to the places where they are needed by facilitating their movement and providing an adequate structure of incentives rather than by direct command. Labor supply policy must be conceived of in broad terms as the provision of a favorable milieu for work activities, not in the narrow terms of a "labor draft."

DISCUSSION

WILLIAM HABER: I find very little in the papers presented with which to disagree. Quite the contrary. In common with most economists, the speakers recognize that under conditions of full employment, or even in an economy characterized by a high-level, if less than full, employment, inflationary dangers are ever present; that these dangers are perhaps increased by the extent to which large and powerful labor organizations and corporations "determine" wages and prices; that the magnitude of our expenditures for national security—for defense and international aid—almost inevitably increase these dangers. No one can quarrel with these conclusions.

Nor can one dispute the assumption that the problem with which we are concerned is not transitory. This is also generally recognized. Speaking at these meetings a year ago, Arthur Smithies said that it was now "agreed by everyone that a federal budget of less than 40 billion dollars is out of the question in the foreseeable future, and one can contemplate 50 or 60 billion and still seem sound and responsible." The Committee for Economic Development in commenting on national security expenditures of about 20 billion dollars in 1949 suggested "that the fear of war may dominate our lives for a generation," and that large-scale national security measures seemed necessary for years. Mr. Musgrave, in his paper, appears to concur in these views and concludes further that "the level of [tax] rates required to sustain a 42 billion dollar budget is well within the economy's taxable capacity." In fact, he goes beyond and suggests that even a budget of 6 billion dollars above that amount should not produce an adverse effect upon incentives and investments. In brief, we are likely to experience vast public outlays for defense for a long time to come, and the size of our national income, present and prospective, indicates that we can support such outlays without serious injury to the market economy.

How are we to deal with the inflationary dangers which are said to be inherent in the present situation: with the labor pressure for higher money wages; with the manpower shortages likely to arise in specific occupations should defense expenditures increase in 1950 or 1951?

Mr. Haley's analysis of what not to do seems to me to represent good sense. There is no case for direct control of prices or for rationing under present circumstances. Assuming the proposals for such control were politically favorable, that they could be adopted, the wartime psychology necessary to secure public acceptance and support does not exist. The kind of "compulsory voluntarism" relied upon in Britain during the war and in our own country in the fields of manpower, wages, and other areas can find acceptance only when such measures represent a national imperative. I assume, of course, that wide public acceptance is both desirable and indispensable.

The issue of control is perhaps especially relevant to wages. Many now hold that "the power of great unions is too great for the purpose of determining wages," and that "unless some alternative mechanism for wage determination is developed the full employment policy may mean inflation."

The probability of securing labor and management support for control of wages and labor mobility is in my opinion out of the question. I doubt its desirability under existing conditions even if such support could be secured. We have no choice but to rely upon collective bargaining with all its imperfections and trust that experience will contribute to the development of more responsible union wage policy as well as to more responsible public price policy.

The alternative is compulsory arbitration of wage disputes—with direct and indirect sanctions. Experience here and abroad compel us to reject this alternative.

With respect to mobility, occupational shifts and shortages, Mr. Reynolds is on safe ground in pleading for an improvement in the knowledge and organization of the labor market. Our experience between 1941 and 1945 tells us that we have substantial manpower reserves to be drawn upon in case of national emergency. In my judgment the labor force could have been increased to perhaps 70 million during the last war if military and civilian conditions required such expansion.

Quite apart from the requirements of a cold war or a hot war, the case for improving the organization of the American labor market is unassailable. In fact only thus can we avoid serious manpower bottlenecks, increase labor mobility, reduce the time span between jobs, and make for a more efficient utilization of our labor reserves. Whether we can avoid a labor draft in case of war is difficult to say. There were potent factors in favor of such a draft during the last war. The President pleaded for it, and his plea was backed by the combined weight of the armed services. Yet Congress shrank from enacting a compulsory labor service. In retrospect Congress was right. The case for compulsory assignment to work was not too strong. Local labor shortages, occasional strikes, the employment of workers in nonessential activities, the strong moral case for applying the same standard to civilian employment as to military assignment—these were the arguments. They were not sufficient to sway Congress to set aside the right to quit and the right not to work. What is more, its enactment would have led to gross inequities unless compulsory assignment were accompanied by safeguards designed to underwrite minimum conditions as to transportation, housing, wages, community facilities, provision for workers' dependents, and similar regulations. In brief, Congress recognized that an obligatory work law even in time of war inevitably injects government regulation into every phase of human relations.

One final note—and it needs little emphasis in view of the tone and conclusion of preceding papers. There are no easy solutions to labor and manpower problems. In fact, the conclusion forced upon us is that simple answers to complex problems are usually wrong. Either during cold war or real war or no war, strikes have a way of taking place in spite of sanctions to punish the strikers. Wage demands persist in spite of the economist's judgment that such increases only add fuel to the inflationary fire. Responsible wage policy and price policy can probably not be enacted by law. With all their shortcomings, indirect measures rather than direct controls should be fully adequate for the problems in the present period.

HERBERT STEIN: I agree with what I understand to be Mr. Musgrave's main conclusions: (1) that given an appropriate tax policy 42 billion dollars of federal cash revenue could be raised without serious adverse effects upon economic growth and efficiency if it were necessary or desirable to do so; (2) that probably 50 billion dollars is manageable, although obviously more difficult.

However, I do not suppose that Mr. Musgrave wants to leave the implication that a 50 billion dollar budget or even a 42 billion dollar budget is a matter of no concern. As I understand the policy implications of Mr. Musgrave's analysis, they are: (1) that if approximately the yield of the present tax system is required, some revision of the present structure would be desirable on a mixture of equity and incentive grounds; (2) that if substantially more revenue is required it should be obtained from sources other than corporate profits and upper bracket individual incomes, which means essentially from excise taxes, pay roll taxes, or lower bracket income taxes.

Mr. Musgrave has not attempted a complete count of the tax reforms that might be desirable if the present over-all tax burden needs to be continued. He suggests some integration of the individual and corporate tax, some extension of loss carry-forward, and some liberalization of depreciation and obsolescence charges. Perhaps he would also add averaging to this list. This package would cost, say, 2 or 3 billion dollars at least. Two or 3 billion dollars is not a lot of money, but, especially in view of the real arguments for elimination of many excises, the attempt to make it up from other revenue sources would raise certain difficulties. By this I do not mean merely that making it up from other sources is politically unlikely. More important, I think the presumption in favor of cutting 2 or 3 billion out of the budget rather than trying to find another 2 or 3 billion of revenue would be quite strong. Even more, I should think that only expenditures of the most urgent character would justify any substantial increase in the total revenue burden above its present level.

Running throughout Mr. Musgrave's paper is the idea of an optimum rate of capital formation which it should be the object of tax policy to maintain. Some such idea is present in almost all discussion of tax structure, although it seems to take an unusually explicit form in Mr. Musgrave's paper. It may be worth while to note that this idea leaves the argument somewhat open-ended. We do not know what the optimum rate of capital formation is or how to measure it or even very precisely what it means. I think that if the kind of tax reform suggested by Mr. Musgrave were objected to on the ground that continued net capital formation is not a matter of importance to the society, it would be very difficult to find a logical reply. And if the difference of opinion were simply between somewhat more or somewhat less capital formation, it would be impossible, I think, to establish any objective basis for preference. My own general prejudice is in the direction of believing that somewhat more capital formation is always better than somewhat less. However, I recognize that that is a personal prejudice on my part.

Mr. Musgrave talks about capital formation as a single homogeneous total which has an optimum size without regard to the quality or character of the

capital formation. I think we obviously are interested in the quality of capital formation and that interest may have some bearing on the issue of the division of labor between monetary restriction and taxation, which Mr. Musgrave has discussed. Mr. Musgrave suggests that as between a combination of tight monetary policy plus easy tax policy on the one hand and a combination of easy monetary policy and restrictive tax policy on the other hand, the most important basis for choice is the effect upon distribution of income, assuming that total capital formation is the same. However, it may be that the character of capital formation would be different in the two cases. Conceivably with the easy monetary policy and tight tax policy we might get capital formation of least risky types, financed more largely by debt and carried on more largely by established big businesses than in the case of less restrictive tax policy and more restrictive monetary policy.

Finally, I would like to express a little concern about Mr. Musgrave's willingness to rely on the earned income credit as a device for mitigating the effects of steep progression in the individual income tax. In his own discussion of the possibility of imposing taxes selectively upon rent incomes rather than upon nonrent income, Mr. Musgrave suggests as an important objection that this might conflict with certain elementary principles of equity. I think his suggestion for distinguishing between so-called "earned" income and other incomes encounters the same objection.

TRANSPORTATION IN CAPITALIST AND
SOCIALIZED ECONOMIES
AN APPRAISAL OF NATIONALIZED TRANSPORT IN
GREAT BRITAIN—PART I

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In most of the countries of the world today railroads are operated as a branch of the government, either as a government department or as a wholly government-owned and operated corporation. These railroad organizations may be called by various names. In Germany it is simply the German Railway. In England it is the Railway Executive, a subdivision of the British Transport Commission. In Canada it is the Canadian National Railways which, although in most respects operated as a private corporation, is nevertheless an arm and a part of the Canadian Dominion Government and used to implement national transportation policy. Even in the United States we have nationalized certain transportation agencies including the Alaska Railroad, the Inland Waterways Corporation, the Panama Railroad and its associated steamship line to New York, and the military air and ocean transport services. However, in the United States these national ventures in the field of transportation still are of isolated, limited, or specialized character. The only transportation field so far quite generally invaded by government operations is that of urban transportation. Boston, New York, Chicago, San Francisco, and many other cities have become owners and operators of urban streetcar and bus transportation on a community-wide scale, chiefly because of the financial difficulties encountered by the private operators. Part or all of the capital costs and sometimes part of the costs of operation of these urban enterprises are borne by local taxation. The assumption of part of the capital costs and some of the operating expenses out of taxes shifts the burden of supporting these enterprises in part to the public treasury.

I know you have been keenly interested, as I have, in following the recent nationalization of British railways in order to discover what lessons can be learned from this bold venture into the socialization of transport, which is of great significance to students of transportation in the United States.

During and immediately after World War I, the railways of Great Britain were operated under government control. The Ministry of Transport was created in 1919 with the Minister of Transport as a Cabinet officer. In 1920 a White Paper of the Minister of Transport

proposed the amalgamation of the railways of Great Britain into four geographical systems, all serving London and each serving a distinct area, and the substantial reduction of the capital structure of the railways. The Railways Act, 1921, was enacted by Parliament to provide for the amalgamation of the railways into four regional systems, several jointly operated lines, and the passenger railways in Metropolitan London.¹ A tribunal was created to approve plans of amalgamation and to prescribe a plan of consolidation if a plan was not agreed upon by the railways. The Railway Rates Tribunal was created by the Railways Act to exercise jurisdiction over railway rates and charges. The four systems were organized as the London, Midland and Scottish Railway, the London and North Eastern Railway, the Great Western Railways, and the Southern Railway. The capital structures of the railways were simplified and substantially reduced.

The London Passenger Transport Act, 1933. In 1933 the London Passenger Transport Act was passed by Parliament as a result of the recommendations of the Labour Party and the Minister of Transport, at that time, Mr. Herbert Morrison. The Act provided for the co-ordination and integration of the underground, tramway, motorbus, and surface railway passenger transportation facilities operated in Metropolitan London by a score of private companies into a public trust type of enterprise in which the owners of the securities of the private companies were given securities of the newly created London Passenger Transport Board. This new enterprise was managed by a Board and a Council in which the security owners, management, labor, the governmental bodies, and the public were represented.²

The Road and Rail Traffic Act, 1933. In the same year Parliament enacted the Road and Rail Traffic Act to provide for the more effective regulation of road transport, to regulate railway and highway competition, and to promote the co-ordination of railway and highway transportation.³ Among other things, this Act authorized railways to establish agreed charges for all or part of the traffic of shippers by railway at rates negotiated by the shippers and railways subject to approval by the Railway Rates Tribunal and the right of other shippers to negotiate similar rates.

Wartime Control of Railways. The Emergency Defense Powers Act, 1939, provided for the control by the Government of Great Britain of the railways and the London Passenger Transport Board undertakings for the period of the war and for a period of one year after the termination of hostilities. The Ministry of Transport issued the Railway Con-

¹ Railways Act, 1921, 10 and 12, Geo. 5, C.55.

² London Passenger Transport Act, 1933, 23 and 24 Geo. 5, C. 14.

³ Minister of War Transport, September 1, 1939.

trol Order of 1939 under which the railways and the London Passenger Transport Board were operated as unified facilities under government direction and control.³ The initial arrangement provided for a community of financial interest between the government and the railways. The revenues were pooled, and each railway was paid from the pool annual revenues equal to the average annual net for that railway for the preceding three years and for the London Passenger Transport Board for the preceding fiscal year. The surplus was then divided among the carriers according to a percentage formula. Later, in 1940, a change was made in the formula.⁴ After this agreement the government received the net revenues of the railways and the London Passenger Transport Board and paid the railways and the L.P.T.B. fixed annual payments. The pooled earnings exceeded the amounts paid to the transport companies and resulted in payments of surpluses to the Treasury of over 176 million pounds in the period of the agreement, 1941-44.⁵

The wartime control of British railways entailed close co-operation between the railways and the government, particularly with the armed forces and defense agencies. Special flat rates or charges regardless of the normal ratings of the goods were made with government agencies and special fares were made for troop movements. Normal competitive routings and interrailway relationships were disrupted in order to adapt the services to the requirements of wartime traffic which did not conform to usual geographical or commercial patterns. The government and joint railways control of train movements and car supply were greatly enlarged. All privately-owned railway cars or wagons were requisitioned by the government and assigned to the central car pool. Close co-ordination of the railways and liaison with the government and the public were necessary in order to provide for emergency movements, priorities for traffic, alternative routes of movement, war damage and disruption of services, protection of property, and other problems growing out of the operation of railways in or near theaters of military operations. The strain of war operation and war damage placed a heavy burden upon British railways in facing the problems of rehabilitation and readjustment to postwar operations.⁶ The British railways ceased to be free agents at the outbreak of World War II. They served during the war primarily to meet the needs of the government in the conduct of the war and secondarily in normal transportation services.

Nationalization and Social Doctrine. The nationalization of railways and other transport industries in Great Britain, as it took place last

³ Agreement applicable December 31, 1940.

⁴ R. J. Eaton, *The Last Five Years of British Railway Transport* (London: Institute of Traffic Administration, September, 1945), p. 10.

⁵ R. Bell, *History of British Railways During the War* (London, 1946).

year, must be traced to the principles of Fabian socialism. The most influential British socialist organization, the Fabian Society, has been working since its foundation in 1884 for the nationalization of all industries considered readily susceptible to public ownership, such as transport and other public utilities, as preliminary steps in the gradual socialization of industry by legislative action rather than by violent social revolution. The aspirations of a half century were realized by the victory of the Labour Party in the British general elections in 1945. The doctrines of the Fabian Society motivated the Trades Union Congress and it, in turn, the Labour Party. In 1945, prior to the general elections, Transport House, the headquarters of the Labour Party, issued a report insisting upon the establishment of a National Transport Authority and the co-ordination of railway, road, waterway, and air transport under nationalized monopolies.

Another interest group which exerted great influence in the nationalization movement was the large permanent civil servant faction in Great Britain. Many of the influential members of this group held key posts in the Postal Service, the Ministry of Transport, and in municipal corporations which operate electric, gas, and local transportation undertakings, as well as in other government offices not engaged in public utility enterprises. Civil servants are not prone to resist expansion of governmental activities.

At the general elections the Labour Party and independent labor groups elected 398 members of the total of 640 members seated in Parliament, a five-eighths majority due, in part at least, to the fact that the Conservative and Liberal Parties, despite widespread consideration of fusion, ran separate candidates against the Labour candidate. In many cases the Labour candidate was elected by a plurality over his opponents although failing to obtain a majority over both his opponents. The Conservatives elected 190 members and the Liberals but 25 in the momentous 1945 elections. Labour has a 62 per cent majority in Parliament despite the estimates of some political analysts in Great Britain that the Labour Party has between 40 and 45 per cent of the voting strength of the nation.

The nationalization of transport in Great Britain can be said to have come about as a result of the collaboration of the civil servants or government employees and the employees of the railways and other utilities who were and are members of the trade unions. These groups, working through the socialist Labour Party, elected a sufficient number of members to Parliament at the general election in 1945 to ensure the socialization of the railways and other means of transport.

The nationalization of railways in Great Britain was made easier

for those who vigorously advocated it by the apathy of many who opposed ownership and operation.

1. British shippers were singularly apathetic or even indifferent. They did not protest vigorously nor did they present in any effective way the reasons that must have been clear to them as to why nationalization would not be good from their viewpoint. Only a few shipper spokesmen pointed out that nationalization was inimical to the interests of shippers.

2. The owners of British Railway securities were likewise apathetic. There is evidence that some of the groups of investors were not displeased by nationalization because of increased security of their income, although they did protest that the rate of interest originally proposed to be paid, $2\frac{1}{2}$ per cent, was inadequate, and that the amount that they were paid in exchange for some of the securities was too low. When the interest rate was raised to 3 per cent and some adjustments were made in the exchange prices, their objections became less strenuous.

3. Labor unions generally and particularly those including large numbers of transportation employees actively favored nationalization. In part this was on theoretical socialistic grounds. In other cases it was sought as a remedy for what the railway employees considered unsatisfactory wage and working conditions. In part this was because unions had found the threat of nationalization as an easy weapon to brandish in past years. A labor spokesman urged as a reason for nationalization that "a socialistic government would be an ideal employer."

4. The public, more or less "fed up" with poor service and deteriorating equipment, was likewise apathetic or sympathetic toward nationalization. Public opinion was somewhat unfavorable to railroad management. Two proofs may be cited. The Conservative Party in its present campaign does not propose to undo nationalization of railroads although it does propose the return of trucks to private ownership, decentralization of management of the railways, and the return of the highway passenger transportation either to local governments or to private enterprise. Earl Lloyd George, a Liberal Party member of Parliament, the son of David Lloyd George, characterized the railroads as inefficient and antiquated with boards of directors "overloaded with octogenarians, many of whom knew nothing about running railroads," and unable to cope with present-day problems. He comments "that the nationalization of railroads was accomplished without stirring up any public opposition to speak of" because of the inefficiency of private operation.⁷ This observation is particularly significant when one considers that although the Labour Party has a large majority in Parlia-

⁷ "What Is Socialism Doing to England," *Steelways*, May, 1949, pp. 1-5.

ment, it does not have a majority of the British voters. The majority is divided into the Conservative, the Liberal, and several smaller party groups.

The British Transport Act. It is important for us to appreciate that nationalization means more than government purchase of a few more or less efficient rail lines. It means expropriation by government of all, or nearly all, transport. The British experience in this respect is significant. As a result of their passage of the Transport Act, when it became effective on January 1, 1948, the government of Great Britain took into direct government employment about 900,000 persons, or about 4 per cent of all the persons employed in British industry. This large bloc of government-employed voters alters the transportation structure of Great Britain.

You are all aware, I am sure, that the Transport Act of 1947 provided for acquisition on January 1, 1948, and for public operation thereafter by the British Government of all of the following transportation and related facilities, with a stated acquisition value of over 1,250 million pounds: (1) all British railways, including warehouses and other facilities (this includes 4 main-line and 56 small or short-line railroads, totaling nearly 205,000 miles of railway and more than 52,000 miles of railway trackage); (2) all British canals, totaling 1,953 miles of waterway, but only a relatively small percentage of the barges and vessels operating on the waterways, all of which up to now have not been expropriated; (3) all London Metropolitan bus, street-car, subway, and other local transportation facilities; (4) all British nonlocal trucking of goods or freight, with some minor exceptions of vehicles used in special commodity haulage; (5) all dock and harbor facilities; (6) all hotels, restaurant facilities owned by any of the acquired enterprises; and (7) all privately-owned railroad freight cars, of which there are about 580,000 units. Air transportation enterprises had previously been brought under government ownership and operation as British Government monopolies in both domestic and overseas air services. Nothing is left to private enterprise other than a small amount of truck operation and a few private barges.

The Effects of Nationalization. The actual results of the last eighteen months of nationalized operation of British railways indicate that the customary pattern is evolving. The British railways, despite rate increases, operated in the red in 1948, and the British Transport Commission frankly stated in its voluminous first annual report that the future outlook for adequate earning power is not good. At the same time British railways have suffered a wave of slow-down strikes and protests of railway workers expressed politically and in industrial discontent and bickering with the Railway Executive.

Public criticism of nationalized rail management by Labour leaders indicates that the millennium did not arrive insofar as the average employee was concerned. British railroad workers in the very lowest wage brackets have been granted small wage increases in contrast to the railway workers' demand for a much larger increase for all workers. A demand for this general increase was denied September 9, 1949, by the British Government Conciliation Board.

The British public has received somewhat better passenger as well as express or fast freight service than it did during the war, but this improvement is probably no more, and possibly less, than would have been provided by the former owners by this time, had they been permitted to continue under private management. Moreover, funds accumulated during the war, representing accrued depreciation, are understood to have been impounded by the British Transport Commission to be reappropriated by them in accordance with ideas and principles still to be announced. The British Transport Commission apparently has inaugurated straight line depreciation based upon the original cost of the property in the place of the method of replacement followed by the British railways prior to nationalization. This procedure disregards the greatly increased level of replacement costs as original capital costs, and may not accurately measure the actual depreciation of the properties, although just what has been done in this regard is not clearly indicated in this first annual report, covering 1948.

What did nationalization of British transport at the beginning of 1948 mean to the British shipper? It has meant almost complete monopoly—state monopoly of virtually all internal transportation by the national government.

Under the Transport Act, the right of the shipper to select the kind of transportation best suited to his needs has been drastically curtailed, if not wiped out altogether. Excepting for his right to operate his own trucks for purely private operations in the transportation and delivery of his own goods, the British shipper must in the future depend entirely upon government-supplied transportation.

One of the real purposes of acquisition of British highway transport, canals, and docks in addition to the railroads was to enable the national government to prevent competition between these types of service and between carriers of the same types. The reasonable regulation of competition among transportation carriers in the interests of preventing unnecessary duplication of facilities and wasteful practices is desirable in the public interest, but the undue restriction of competition is inimical to the users of the services. The result has been generally to deprive the shipper of his choice of transportation facilities. For example, the British Transport Commission has the power to prohibit

canal carriers from operating for hire except under license in order to secure the better use of canals. Highway carriers cannot operate except in a pattern which harmonizes with the government's scheme of operation of all forms of transportation. The Transport Act states that its purpose is to provide and promote an "efficient, adequate, economical and properly integrated system of public inland transport and port facilities within Great Britain." There is to be little, if any, room for shipper choice of means of transportation or for carriers to seek business under this nationalized system of transportation.

Another field of great interest to every shipper everywhere is that of rates and charges. What policy will the new British state monopoly of transportation follow? It is instructed in the law to conduct the whole enterprise so that the revenue may not be less than sufficient to meet the charges, one year considered with another. The British Transport Commission is instructed to prepare and submit to the Transport Tribunal a general program of freight rates within four years after the effective date of the Transport Act; that is, by January 1, 1952.

In May, 1947, when the transport bill was crammed through Parliament, the Minister of Transport announced that there would be increases in rates and charges and increases in wages. Later, the government announced an increase in all railway rates and passenger charges of 24 per cent and 16¼ per cent, respectively, which became effective October 1, 1947. This brought the level of railway charges to approximately 55 per cent over the level prior to World War II. Another request was made on November 28, 1949, by the Transport Commission to Parliament to grant an additional 16⅔ per cent increase in railway rates and canal charges and substantial increases in docking and other charges. Clearly, lower freight rates and passenger fares were not the impelling reasons for nationalization, although the advocates of nationalization stressed the advantages of nationalization in reducing transportation costs through the reduction of wastes and inefficiencies.

The Causes of Nationalization. There is no doubt in my mind that nationalization of British transportation was caused, at least in part, by reasons other than the political and social philosophy of the Labour Party and the 1945 general elections. Some of these reasons may be of interest and significance because they indicate how easily there may develop a sense of dissatisfaction with transportation in a country such as Great Britain.

The failure of railways to work out internal integration of their services and operations; failure of previous governments and also the railways and motor carriers to work out and provide satisfactory joint or co-ordinated services; the ever increasing complexities of railway rates and charges; failure of railways to develop personnel and em-

ployment practices (particularly systems of promotion) which railway employees considered fair and equitable; the apprehension that the railways would be financially unable to rehabilitate and improve their properties; the apparent concern of security owners chiefly in the amount of compensation to be paid them for their securities—all these are sore spots in the transportation industry which must and can be avoided or corrected by improvements in transportation services and co-operation between railroad and industrial management, under government regulation, if socialization of transport in this country is to be averted.

The Trend in the United States. There are tendencies at work in the United States, including the attitude of apathy or default which has been commented upon which preceded the nationalization of transport in Great Britain, which may result in public ownership and operation of transportation in the United States. This trend or drift toward nationalization is of serious consequence to all of us. One of the purposes of this paper is to point out some of its aspects and the consequences if nationalization should eventuate in this country.

The duplication of transportation facilities is often stressed as a weakness of private enterprise in transportation which would be eliminated by nationalization. This duplication has been brought about by competition. It is not always wasteful or undesirable if the amount is not excessive. Many of our important railroad lines were brought into being and continue in existence because of community, industrial, and carrier competition. All of them are today exposed in some degree to competition from other forms of transportation, particularly motor and water transportation. Reasonable competition is in the public interests, but there is some evidence that in the United States facility duplication is becoming undesirable in extent and complexity.

A characteristic of America in peacetime is its overabundance of transportation, each unit or company eagerly seeking traffic. This overabundance is due in part to competitive duplication of facilities and in part to the effects of expansion of facilities to meet wartime peak demands.

A reasonable surplus of transportation facilities in peacetime is a powerful incentive to efficiency in operation, although this surplus can be so large as to be economically wasteful. Each railroad in peacetime strives to be the best of its kind in service rendered and the most efficient in cost of operation. The railroads that compete with highway and waterway transportation have the same problems and incentives. They must be aggressively competitive to survive and prosper. Excessive duplication can and should be reduced by voluntary or encouraged consolidation and by co-ordination.

One of the valued rights of industrial traffic managers is their right to route their own traffic.

The converse of the shipper's right to route is the necessity for solicitation by the transportation companies. American transportation enterprises find it necessary and desirable to spend part of their revenue for solicitation efforts.

Nationalization of railroads strikes a body blow at the privilege of the shipper to select that carrier and route for his shipment and to the right of the carrier aggressively to seek business. The right to route disappears, from a practical standpoint, on the government railroad system. It may be curtailed or eliminated by the restriction by the government of other forms of transportation.

The industrial traffic manager in this country can still negotiate freight rates on economic considerations. Nationalization takes away this right and substitutes for it a regional and political approach to freight rates and transportation costs. The Crows Nest Pass agreement in Canada is an example of political rather than economic rate making. So are the negotiations for reduced rates on British railroads now being pressed by the other socialized industries, particularly coal. The rail-ways have to deal with government agencies, eager to make a favorable showing by exerting pressure on the transportation agency.

Another aspect of the shipper's right to route is his right to move the shipment in his own private means of transport. The right to engage in private transportation is being increasingly relied upon in this country as a means of reducing high transportation costs. It is limited, or disappears, where transportation is nationalized. The government permits competition with itself only to the extent that it is willing or considers it desirable. It can and does restrict the operation of trucks and barges by private industries in order to protect the government transportation monopoly.

In Great Britain the question of private trucking has become a key political problem. Repeated attempts have been made to reduce the number of C motor vehicle licenses. Mr. Ernest Davies, a Labour member of Parliament, has been the most outspoken advocate of further curtailment of the right of shippers to use their own vehicles for the transportation of their own goods. As of June 30, 1949, there were 335,846 C license or limited carrier operators in Great Britain operating 634,769 vehicles. The suggestion that this type of operation should be restricted or prohibited is based upon the desire of the advocates of a complete public transportation monopoly to protect the nationalized transport system against all competition and to increase the revenues of the publicly-operated services.

The advocates of the curtailment of C licenses have also urged the

government to proceed faster in acquiring all passenger transportation vehicles and to develop "an over-all transport policy." These measures point toward a complete public monopoly of all forms of transport of passengers and goods and forcing shippers and travelers to use the government-operated services for all their transportation requirements.⁵

How Can Nationalization be Averted? If as students of transportation, economics, and public transportation policy and in our private capacities as free men, citizens, and taxpayers we prefer private enterprise under public regulation to socialism, we must do more than view it with alarm and deplore the conditions which breed it. As students of economic problems we must decide, on the best available evidence, which type of ownership and operation we prefer, and as free men we should have the right to state preference. It is not an academic problem which can be considered with scholarly detachment, although it should be considered objectively in the light of all available evidence.

The nationalization of transportation is an insidious thing. Usually it comes so gradually and is attended by some elements of necessity that almost before the people are aware of what has happened, the railroads are nationalized. Then, as in Great Britain, it seems to be necessary or desirable to nationalize other forms of transportation. No examples of better services, lower rates or fares, greater efficiency, or better financial results are to be found among nationalized transportation industries. Yet there are those who look with apathy upon nationalization of other industries until their own are threatened, and then it is apt to be too late.

That there is grave danger of government ownership and operation of railroads in the United States is apparent to anyone who takes time to analyze the situation from an objective point of view and is willing to acknowledge symptoms when he sees them. The fact that there is little sentiment in favor of government ownership and operation for doctrinaire reasons has caused some to believe that the danger is remote. Unfortunately, this complaisant attitude cannot safely be justified. Government ownership and operation can be achieved without any large group of people advocating it. It could come by embarrassment as a result of the drying up of sources of investment capital so that there is no source of funds excepting the government, or by default in the active interest of those who prefer a private economy publicly regulated.

The danger of government ownership may be seen in a number of symptoms in addition to the danger of inability to attract capital.

⁵ "Transport Management," *Journal of Industrial Transport Administration* (London), September 15, 1949, pp. 1, 3.

There is the danger that high operating costs with attendant high revenue requirements will produce price levels which, unless judiciously adjusted to what the various types of traffic will bear, will result in the further diversion of short-haul traffic to motor transportation and long-haul traffic to water transportation. The railroads are in real danger of pricing certain of their services so high that they will lose even larger amounts of traffic in which they should be the relatively more efficient type of carrier. Freight rates of all agencies of transport, as service prices, must be made more realistically and effectively competitive. It is often urged by proponents of railroad transportation in the United States that freight rates of other agencies are not realistic because of various uneconomic factors such as subsidy. The question of applying the same yardstick to all forms of transportation, both in determining costs and in determining freight rate pricing methods does not appear to be feasible. However, much can be learned by thorough economic research and cost accounting studies to discover the actual facts of transportation cost behavior.

There is the danger that losses from passenger train services, including express, mail, and other "head end" traffic, will erode the freight earnings to such an extent that the revenue requirements will make the search for additional revenue lead to further maladjustments in freight rates.

There is no bulwark against socialization in the competitive interests of various classes of security owners. One group may be able to assert a priority interest over other groups and profit financially by this action, but collectively this conflict moves the industry closer to nationalization. A dilemma is presented in the situation. The railroads have not been able to attract capital to invest in common stock. They have been unable to do any new bond financing excepting equipment obligations since 1931. Equity stock financing is handicapped by the hazards of uncertain dividends and of liquidation in event of receiverships and reorganizations. If they finance through the issuance of funded debt they increase the fixed charges and increase the dangers of defaults and bankruptcy.

The prospects of legislation which will aid one form of transportation by restricting the proper development of others appear to be remote and is not sought by those who have the interests of all forms of transport at heart. The management of transportation enterprises must seek to solve their own problems within an economic and regulatory framework in which all means of transport are treated equally in the public interest. They must demonstrate positively the advantages of private ownership and operation under public regulation in the public environment which exists in this country today. Business cannot escape

its environmental pattern. The public through their representatives in the Congress and in the state legislatures will probably continue to spend money for the further development of highways, airways, and airports because they wish to have better highways and improved air transportation. The nationalization of railroads is the first step toward the socialization of essential mass transportation and other basic industries.

The best defense against socialization or nationalization of railroads and other agencies of transportation is to be found in the aggressive development of all forms of transportation needed in the public interest, with a realistic pricing of their services; in the co-ordination of the different forms of transportation in order to use the services to maximum efficiency; and in the equitable distribution of public aid and taxes among those who benefit from the services.

In a recent discussion of the problems now confronting railroad management in the United States, Mr. J. M. Symes, Vice President-Operations of the Pennsylvania Railroad, listed as the underlying causes of these problems: (1) the fixing of wages by government wage boards and the rising costs of materials coupled with the lags between increased wages and costs and increased rates and fares designed to generate revenues necessary to meet these increased costs; (2) the handling of types of traffic, including passenger traffic, small package shipments, certain foodstuffs, and mail, which cost the railroads more to transport than they produce in revenue. Mr. Symes stated in part:

There is a large volume of traffic available for all forms of transportation, and those that can provide demanded service at the lowest *full* cost are those that should move the traffic. Rates and costs should be so related that adequate money will be available from earnings to maintain the property in a healthy state and maintain its credit. There should be money available from earnings and depreciation reserves, and perhaps to some extent borrowed, to take care of modernization and obsolescence, in order to provide the kind of efficient low cost rail service this country needs in times of peace, and so absolutely essential in times of war.⁹

Another prominent railroad executive, Mr. A. J. Seitz, in diagnosing the railroad situation, stated his belief that the problem is basically one of keeping revenue in some semblance of favorable relationship to expenses. He pointed to the following handicaps upon the railroads in their struggle to achieve this objective: (1) the regulation of what the railroads can charge for services and of the manner of performing them; (2) a labor situation in which little or no recognition is given to productivity; (3) high costs of materials; (4) absence of real economy in federal, state, and local government, and resulting excessive taxation; and (5) inroads of competing forms of transportation, "made pos-

⁹ "Today's Railroad Situation," Philadelphia, October 6, 1949.

sible at least in part by use of facilities provided at the expense of taxpayers."¹⁰

The purpose of this part of this joint paper is to interpret certain trends toward public ownership and operation of transportation, with special reference to the status and causes of this situation in Great Britain. The managerial and organization aspects of public ownership and operation are discussed by my colleague, Dr. E. G. Plowman, in his part of our joint paper.

¹⁰ A. J. Seitz, Executive Vice President, Union Pacific Railroad, address at Omaha, Nebraska, October 28, 1949.

AN APPRAISAL OF NATIONALIZED TRANSPORT IN GREAT BRITAIN—PART II

By E. GROSVENOR PLOWMAN
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My colleague, Dr. G. Lloyd Wilson, has presented to you the historical developments leading to nationalization of transportation in Great Britain, the present situation, and the unfavorable aspects of such nationalization upon the British economy. His thesis that nationalization has made British transportation "the master, not the servant of industry" aptly sums up the new problem and the still-unresolved conflict. For my part of this discussion, I shall attempt to relate this change in situation to its managerial and organization aspects.

In so doing, I recognize that no human being lives or thinks outside of his own experience and bias; and I therefore declare myself as one having fairly lengthy experience in public as well as private business operations, who believes in private business management under proper public regulation. Also as one who thinks that most socialistically inclined economists have not had such dual experience, and in addition have not thought deeply, if at all, about the theoretical changes in business organization and management resulting from nationalization. If this means that my view of economist admirers of socialism is that, however sincere, they have not had to manage the resulting hodgepodge messes, that is where I think the shoe fits.

Large-scale Enterprises and Public Regulation. Large-scale transportation creates and naturally organizes itself into large-scale management units. The basic question is as to how these large management units shall be controlled by the public; that is, by its more or less direct representative, the modern state or government. The American method is that of private enterprise coupled with quite complete, detailed, and authoritative regulation by the state. That was the British method, but there has now been substituted therefor the socialistic method of ownership and operation by the state. The British state has canceled its previously issued license or charter under which private corporations performed the various mass-transportation tasks. It has substituted its own judgments and policies as manager and operator for the previously existing system of directions and orders issued by its regulatory bodies to the private enterprises engaged in transport.

There is much in Peter F. Drucker's *Concept of the Corporation* that discusses these points ably. Only confirmed socialists would disagree, it seems to me, with his concluding sentences:¹

¹ New York: John Day, 1946, p. 290.

To develop in this country an economic policy which will give us a functional industrial society based on free enterprise and the modern corporation, will not eliminate war. But it will greatly contribute towards world peace and stability—perhaps more and more directly than anything else in the United States could do by itself.

It is unfortunate that Drucker did not elaborate on the theoretical management and organization differences set up when large corporations, such as were the several British railroads, are nationalized. He even accepts, with a sort of fatalistic resignation to the politically inevitable, possible nationalization of American railroads. His statement on this subject follows:

[The public in defining private enterprise] sees the function of government in setting the frame within which business is to be conducted rather than in running business enterprises. It [the public] does not, however, exclude government management or government ownership of natural monopolies . . . proposals for the nationalization of public utilities, railroads and even of natural resources, while not received too cordially, are not felt to violate a basic principle.³

Drucker may be right that the public does not recognize the nationalization of railroads as a violation of a basic principle. The purpose of this discussion is to show that such nationalization is, in fact, undesirable and a basic violation of the principles of sound management and organization. If Drucker is right about this public attitude, then every effort should be made to bring the facts to public attention and real understanding.

The Effects of Nationalization Upon Management. Nationalization affects the efficiency of organization and management of the appropriated business in several vital ways. One major effect is to increase the number of higher or upper-echelon levels of management. In the case of British nationalization of inland transportation, there are four well-defined new management levels that have been added, as follows: the highest is Parliament, itself a committee representing the public; directly under Parliament is the Minister of Transport; next is the British Transport Commission; then come the six management committees, called "executives."

Under the executives, we find the organizations resembling the former companies. Each of these latter organizations is managed by a general manager, appointed by the appropriate executive. Thus under Railway Executive, itself one of the six executives, there are six regional railroad systems, each under its own chief regional officer.

The difficulties and harassments due to this addition of management levels were not unexpected by competent students in Great Britain. Thus an able British economist, Sir Henry Clay, Warden of Nuffield College, Oxford, early in 1947, called attention to these dangers:

The socialist experiment being carried on in England today has found itself faced with this problem; it seeks to avoid detailed political direction of the industries it is socializing,

³ *Ibid.*, p. 3.

to preserve the autonomy of their management in choosing methods, regulating costs, and fixing prices, while imposing some real political control to justify the change it is making. The general device adopted is to entrust the administration of each industry to an independent board or commission, appointed for a term of years and required to operate on commercial lines. But in every case it has been found necessary, if the political object of nationalization is to be assured, to reserve for the Minister responsible to Parliament the power to issue "directions" to the board or commission, which will supersede its autonomous discretion. . . .

I fear confusion and conservatism as a result of this divided responsibility. The issues of industrial management are not the kind of decisions which are suitable for political discussions: they are matters of technique or occasions for market judgment, not decisions which turn on the application of high political or moral principles. They need to be safeguarded in a separate and specialized organization; if they are brought within the compass of governmental action, it is difficult . . . to segregate them and ensure that they are settled by relevant considerations of cost and demand, not by irrelevant considerations of political expediency, even if camouflaged by plentiful use of the word "reasonable."²

C. L. Mowat, a British historian, now at the University of California, from firsthand observation of the newly nationalized British coal industry states:

At present the system has among its principal products an increase in the number of non-producers in the industry, an unexpectedly high range of salaries for executives at headquarters, and a feeling of frustration on the part of many colliery managers and production officials who must serve many masters and endure long delays while waiting for rulings on points large and small.³

Railway Gazette, the leading British publication of the field, commenting on the first year, 1948, of British nationalized railway operations, states:

The first year of nationalized transport has brought the traveling public and shippers nothing more than they would have received had the British railways continued to function. We cannot find any solid foundation for the statement that nationalization has improved the esprit de corps of the Commission's staffs. When we turn to the higher grades in the Commission's service we have noticed with regret that quite a number of the occupants of responsible posts appear to have lost their former gusto for the day's work. They plod along conscientiously, but a feeling of frustration has come over them, and the old zest for the fray has gone. One noticeable trait of members of the Executives and their officers has been their resentment of any criticism, even constructive criticism. Such touchiness is usually a symptom of "inferiority complex."⁴

The Effects of Regulation Upon Management in American Transportation. It may be argued that a somewhat similar set of upper-echelon levels exists in the United States, as follows: the highest is Congress, itself a committee representing the people; directly under Congress is the Interstate Commerce Commission; next is the Association of American Railroads; then come the boards of directors of each railroad company; under each board there is a chief executive officer or president.

There is a great difference between the two lists from the standpoint of the theory as well as the actual practice of management. In the American situation, all levels above the corporate board of directors are of

² "Conditions of Industrial Progress," paper delivered at the University of Pennsylvania, Philadelphia, January 10, 1947.

³ C. L. Mowat, "British Socialism: Pitfalls and Prospects," *American Scholar*, Autumn, 1949, p. 398.

⁴ Abstracted in *Railway Age* (New York), February 12, 1949.

advisory or regulative character. They exist to supplement and prevent or control, not to manage. In the present British situation, every level of the new higher echelons, in theory and to some extent in practice, has detailed and complete management power over all lower levels.

Under present American practice, each railroad is subject to certain influences from the higher levels. Under the British situation, these would not be influences—they would be policies and instructions.

For example, American railroads own and maintain freight cars. The Association of American Railroads quite regularly make suggestions as to new freight car construction, as to reductions in backlog of cars awaiting repair, and as to distribution of empty freight cars to relieve car shortage. These suggestions are often followed, because self-interest so dictates. They do not have the force of law. Similarly, the Interstate Commerce Commission makes suggestions on the same subject, and issues orders to prevent unsafe practices or to enforce proper car distribution—the latter primarily in time of war. Their suggestions are not enforceable. The orders of the Interstate Commerce Commission are enforceable, but are negative in the sense of dealing only with a narrow portion of the total field, leaving all the rest of these freight car problems, at any given moment, in company management hands.

It is possible to contrast these American car supply administration procedures with the new socialized British setup. In its 1948 report, the British Transport Commission comments that it has reduced the percentage of cars awaiting repair and has improved car supply through its pooling procedures. Inherent in its report is its reservation to itself of the right to make appropriations for all capital purposes. It has employed as technical research director a competent expert whose training has been primarily automotive. These actions suggest that the Transport Commission intends, and has begun, to make broad and perhaps detailed decisions as to railroad freight cars, their construction, operation, and maintenance.

Thus British nationalization has created this higher and all-powerful management level, to which all railroad executives in Great Britain must somehow attorn and be accountable. It is a basic management principle that additional management levels, whether upper or lower echelon in type, should exist only because they are needed. If private enterprise can do a lower cost transportation job, as in America today, with fewer upper-echelon management levels, such additional levels are surplusage and should not exist. This surplusage is a basic theoretical and practical criticism of nationalization of any business enterprise. There is no doubt that the railroads of the United States cannot be nationalized and, in fact, cannot be further subjected to detailed managerial control by government agencies without bringing into being to

some extent this defective situation of excess and surplus higher management levels.

Management or Trusteeship? It is sometimes said in criticism of private enterprise that its highest governing body, the corporate board of directors, tends to lose its ownership quality in large business units. Certainly this criticism is apt in the case of the highest governing body of nationalized businesses. In the case of Great Britain, if we consider the highest governing bodies to be the triple device of the Cabinet Officer, that is, the Minister of Transport, next the higher committee or British Transport Commission, and then each of the five lower committees, the so-called "executives," no member of this triple group can possibly be other than a trustee for the property owners who are, of course, the British taxpayers collectively.

Trusteeship has a definite effect upon the management work done by the incumbent. No matter how sincere, a trustee has less personal sense of authority and responsibility, more sense of accountability in both a legal and social sense. For example, it is proper to assume that the trustee group, heading the British transportation system, will be less likely than private boards of directors to introduce improvements that will lessen employment. This does not record private enterprise as being against the concept of full employment, as socialists sometimes argue, since competitive improvements do result in increased employment and higher standards of living, especially under American conditions of government regulation. A good example is our American rule that merger of railroads must not result in unemployment of the ultimately to be displaced workers.

Trusteeship likewise changes the nature of the problems that must be considered by the upper echelons of management. This is because trustees cannot delegate their own power and responsibility to anyone. As a result, any problem that cannot be settled by reference to precedent, law, or custom is bound to reach the trusteeship level, no matter how trivial is the matter. A characteristic of governing bodies of nationalized enterprises is the large amount of petty detail that thus rises to the top, clogging procedure. This weakens ability to operate at the lower levels and weakens ability to plan and decide broad issues at the upper levels.

If the public's trustees attempt to solve this problem by refusing to consider such trivia, the opposite effect of deadening the lower management develops. This is because a basic principle of management is that failure to make decisions at the upper management levels merely drives decision making down into the lower levels, since "the show must go on." Lower-echelon decisions necessarily are based on precedent and custom, and thus merely repeat the past, gradually choking the organiza-

tion into obsolescence and decay. It was no accident, from the standpoint of management theory, that the British Minister of Transport has already had to refuse to answer questions submitted by House members as to why particular passenger trains were late or dirty. This refusal to answer this type of question on the floor of the House of Parliament merely drives the question farther down into the lower management where it may or may not be properly handled because of the detailed control inherent and residing in the trustees, who themselves have refused to consider the question. Exactly the same thing may be expected to happen in the United States if government ownership and operation of our railroads eventuates. In fact these or parallel situations are often cited from the period of government control of United States railroads during World War I.

Trusteeship of government type also changes the character of the men who occupy the top positions. In Great Britain the new public trustees include primarily civil servants and labor leaders, with a minority of proved railroad and other transportation executives. This leaves the trusteeship group open to the "amateur experting" within their ranks, of persons with little or no training in problems of management, organization, or transportation. Of course this problem will lessen in importance as the service of board members grows longer. They will educate themselves and each other, and they will learn from their subordinate managers. During the interim of gradually acquiring experience, there will be sharp conflicts between the upper echelons, or trustee group, and the newly depressed echelons, or career management, of the different transportation units.

To be specific, railroad executives taken over with their expropriated companies may be expected to resent having to atton to and be dictated to from upper groups who are not their "peers" in ability and experience. There is strong evidence that this rift between upper-echelon trustees and lower-echelon practical management has occurred in Great Britain. How long before this breach will heal is a matter of speculation. A reflex of this inner and bitter conflict between the new and older management is found in the comments of British labor executives that there are too many executives still running British transportation who do not believe in nationalization. Yet British labor leaders themselves also find their position anomalous. They are now serving as public trustees of transportation, and in such roles the particular individual labor leaders apparently have voted against wage increases. Incidentally, British railroad wages today average about \$25 per week; American average \$69 for the same period.

A very objective and fair-minded appraisal of this new trusteeship or upper level management problem in its effects upon transport in

Great Britain is expressed by H. G. Marsden, Transport Advisor of Lever Brothers and Unilever. He observes that "the British trader realizes that the whole transport world he knew in the past has changed fundamentally, and nothing can alter this bare fact." Although the average shipper has so far felt little or no actual changes in his day-to-day relations with transportation he is unsure as to what is to come. Marsden suggests that adequate co-ordination rather than government monopoly could have served the best interest of shippers and that the shipper is hampered in dealing with the government transport monopoly because benevolence is not normally a characteristic of monopoly. He cautions the British Transport Commission: (1) that "the proper integration [of transportation] should not mean that any form should be restricted for the benefit of any other form or forms of transport"; (2) that "nothing should be done to prevent each form from developing its natural advantages and inherent possibilities so that industry and the traveling public may benefit from improvements in service and cost"; (3) that "each form should be allowed to make its special contribution and be encouraged to progress on the merits of its own efficiency." He warns that a government monopoly unless carefully safeguarded may deliberately restrict ways of doing things cheaper in order to maintain in existence ways of doing it dearer. He closed with the point that transportation must be the servant and not the master of industry.⁶

Even a cursory knowledge of nationalized transportation in other countries indicates that government-owned railroads react to such problems as the peacetime surplus of transport in an entirely different way than privately-owned railroads. There are two major differences. First, the government does not reduce working forces or seek to accomplish efficient operation in order to survive. The incentive for efficiency is not there. Second, government is able to and does use its police powers to lessen the impact of competition upon its public transportation. Government can simply fail to supply roads on which competitive transport may develop, or it may ration gasoline or restrict the licenses of trucks to the same end. It may simply prohibit competition. Not only that, but competition between railroads also disappears, since all are part of the same government organization. There is no longer any point to competitive striving to be the best railroad in a government transportation monopoly. Marsden's comments make clear that these trends of upper-level management policy are possible and have actually begun to happen or to be apparent in Great Britain.

Nationalization and Overfunctionalization. Private enterprise uses mixtures of staff and line organization and line and functional delegation of authority and designation of responsibility in highly varied, in-

⁶H. G. Marsden, "Traders and The Transport Act, 1947," *Journal, Institute of Transport* (London), July, 1949, pp. 152-156, 159.

terrelated, and flexible fashion. Government, on the other hand, tends to functionalize its management to an excessive and inefficient degree. This happens through the simple process of attempting to obey laws that have been written in clear, unqualified language. The new British nationalized transportation agencies are already the victim of and are suffering in efficiency from this overfunctionalization.

It may be pointed out that any effort to establish controls of managerial type through American government agencies tends to bring about this same overfunctionalization problem in American transportation. The so-called "full crew" laws of certain states may be cited as illustrations since these laws substitute the fixed unyielding words of legislation for managerial discretion. Some of the orders or decisions of the National Railroad Adjustment Boards likewise have had this quality of settling jurisdictional disputes between American railroad management and American railroad employees by bringing about duplication, sometimes referred to as "feather bedding."

When a trans-Atlantic liner arrived at a British port, in the former setup it was met by one executive from a transportation standpoint. This executive was in a position to control the operation of docking, the marshaling of passenger and freight trains, the warehousing and sorting of mail and package freight, and the dispatch of trains or busses. He either had specific authority over all these activities or was in a position to bring about co-ordination, on the spot, of such problems as were beyond his direct control.

Under the British Transport Law, 1947, there have been set up six executives, as follows: Railway Executive, Docks and Inland Waterways Executive, Road Haulage Executive, Road Passenger Executive, London Transport Executive, and Hotel Executive.

It follows that two, three, and even all six separate functional management groups will have some responsibility in handling the docking of an ocean steamer. This serious duplication and mutual interference of the different managements will doubtless be solved by some additional upper-level executives, such as port captains reporting directly to the Transport Commission.

Excessive functionalization of authority and responsibility, which is endemic in government enterprises, creates thousands upon thousands of individual management situations and problems. It also creates and maintains thousands of unnecessary jobs. Many of these difficulties are resolved by developing duplication. This is true where the functional straight jacket results in overlapping of duties or jurisdiction. It is also true where the functional line tends to divide a single responsibility into two parts. Both sides tend to organize to do the whole job, with resulting duplication, conflict, and inefficiency.

The natural result of excessive functionalization is the jurisdictional

dispute, in the settlement of which a line of decisions evolves that marks the boundaries between persons and administrations. These decisions are themselves an illustration of the weakening of top management due to addition of unnecessary levels, all of trusteeship rather than managerial character. Employees and minor executives settle their troubles by duplication and by decision of jurisdictional questions at the lowest possible level in the hierarchy, thus avoiding the top trustee groups as fully as possible. As Urwick, brilliant English student of organization and management, put the problem:

Whitehall . . . is still a tiltyard where desperate assaults-at-arms are engaged over points of interdepartmental competence of no interest whatever to the public.¹

A basic principle of management theory is that the more detailed the functionalization, the narrower the limits of operating or line executive discretion. That is why military organization has resisted and must resist functionalization—since the job of the commander of a group of soldiers on the front line is to win his local fight or part of the battle, not engage in report-writing or message-sending or bickering or even pleading with some functional equal in command.

It must be said for the British Transport Commission and the executives that there is some recognition of this natural tendency towards overfunctionalization. Thus certain railway services of local character have been turned over to the London Transport Board, improving possibilities for efficiency and co-ordination. Some committees have been set up that bridge gaps between the different executives.

Overfunctionalization is especially pronounced in government undertakings in such fields as: (1) methods of pay, rate of pay, promotion and advancement, (2) procedures for employment and tenure, including discharge, (3) purchasing, (4) selling, whether junk, equipment, property or products, (5) making and enforcement of budgets, (6) procedures for depositing and paying out of moneys, (7) approval of construction or repair, and (8) procedures of negotiation with customers, employees, or public.

It will be interesting to watch the further development of British nationalization of transportation, to see to what extent overfunctionalization is met "head on" and lessened or moderated, even though by costly and duplicative organization or procedure.

Management Defects Illustrated by Mexican State Railways. British nationalization is still too new to do more than point out trends that prove existence of the already well-known defects inherent in socialized business enterprises. For this reason, a brief summary of Mexican rail-

¹ L. Urwick, "Axioms of Organization," *Public Administration Magazine*, October, 1935, pp. 344-358, 385-392.

way management in 1942, 1943, and 1944 is pertinent. This summary indicates clearly how difficult it is to overcome the theoretical management faults of socialization of business.

In the Mexican Revolution, 1910-14, many of the railroads were taken by the revolutionists, and the United States citizens were either driven out or left the country voluntarily. The railways, including stations, roundhouses, and shops, were badly damaged by military operation during the Revolution. The National Government which emerged from the Revolution expropriated the railways, and henceforth the railways of Mexico have been owned, managed, and staffed by Mexican citizens, many of whom had never before occupied or been specifically trained for supervisory or managerial responsibilities.

Mr. O. M. Stevens, for many years a United States railroad operating officer and now President and General Manager of the American Refrigerator Transit Company, spent several years in Mexico as consultant to the National Railways of Mexico in 1942-44. His observations with respect to the condition and prospects of the railways in Mexico are interesting and significant because of his experience in both countries with railroads under private and public ownership and operation.

Mr. Stevens found that the service of the railways, both freight and passenger, was poor, characterized by irregular schedules, chronic lateness of trains, inadequate car supply, and the blockade of terminals with cars and freight which remained in the ports and terminals literally for months. "The plain fact is that all modern industry is dying for lack of transportation—existing industries dying and new industries haven't a chance, notwithstanding all the brave talk of industrial expansion."

Stevens lays the responsibility for this deplorable state of railway transportation to the fact that the politicians of Mexico have permitted the railway system to be run by the labor unions. The management of the railways is dominated by the union leaders, and even minor supervisory employees have no control over the men nominally under their supervision and direction. Superintendents, yardmasters, or foremen who reprimand employees for work failures are overruled by the local unions. These lower-echelon executives and supervisors are also union members. "On those railroads every man and officer from the section laborer, through all the supervisory and official personnel clear to the top, belongs to the union. . . . Nothing more is needed to show the utter impossibility of having a functioning, efficient, disciplined organization. . . . No officer has any authority whatever."

Mr. Stevens estimates that with 8,300 miles of railway mileage with a traffic density of about 20 per cent of that of a comparable United

States railway system, there are 56,000 railway employees, about 30,000 more than are needed to operate the system efficiently. "The whole story of the Mexican Railroad unions is to create as many jobs as possible, to get the maximum possible number of people on the payrolls—in total and in complete disregard of the need." Wage increases are demanded frequently and as frequently given by a government helpless before the threats of labor—then a corresponding freight rate increase intensifies the inflationary spiral. Nevertheless wages are very low, in comparison with American pay scales. As Stevens puts it: "Naturally, the excessive employees on the Mexican Railroads and the resulting low production per man makes for low rates of pay. . . . The pay is miserably low, the conditions under which Mexican Railroad men work are indescribably bad . . . safety on these railroads, for both employees and passengers, is almost non-existent. . . ."

Mr. Stevens' conclusion is that the economic situation of the nationalized railways of Mexico is hopeless and helpless unless union management is renounced and the railways taken over by "good, able management, composed of honest men, trained and experienced in railroad work—men loyal to their Country and who have a decent regard for the just rights and problems of labor." Such a change could change the National Railways of Mexico "in a few years, from the worst railroad system on this continent to a place among the best."⁸ The best such management would be private enterprise management.

Management Defects of Nationalization Summarized. There is a well-established and long-observed propensity towards poor quality management inherent in ownership and operation of government proprietary enterprises. It is amazing that some economists of Great Britain and the United States knowing this are nevertheless able to condone expropriation of major industries. Can anyone seriously argue that social good comes from a backward step? Yet Drucker, whom I have already quoted, starts off the best study of the subject by accepting the idea that railroads and certain other enterprises may be expropriated as exceptions, without upsetting the public belief in private enterprise.

Adam Smith, in 1776, discussed this same subject, condemning even corporation-type management of business enterprises:

The only trades which it seems possible for a joint stock company to carry on successfully, without an exclusive privilege, are those of which all operations are capable of being reduced to which is called a routine, or to such uniformity of method as admits little or no variation. Of this kind is first the banking trade; secondly the trade of insurance from fire, and from sea risk and capture in time of war, thirdly, trade of making and maintaining a navigable cut or canal, and fourthly the similar trade of bringing water for the supply of a great city.⁹

⁸ The comments of Mr. Stevens are quoted from his address before the American Railway Engineering Association and the Western Society of Engineers, Chicago, March 12, 1946.

⁹ *Wealth of Nations*, pp. 598-599.

Substitute railroad for canal in Smith's list and we find a parallel in the British Labour Party platform, as follows:

It is important to remember that "Let Us Face the Future" was more than a list of proposed reforms. It was a plan designed to provide a basis both for Britain's recovery from war and for a better Britain in the future. To ensure recovery it was essential that our basic industries should be efficient; to attain a truly democratic Britain it was essential that they should be controlled in the interests of the nation as a whole.

Labour therefore asked for, and was given, a mandate to take over the basic industries on behalf of the people. These were fuel and power, transport, and iron and steel. All of them vital in an industrial nation such as Britain.

Under capitalist management these industries had fallen below the standard of efficiency necessary for national recovery and prosperity. Under public enterprise they will be made efficient.

They were run in the sectional interests of a relatively small number of people. Under public enterprise they will be run by and for the community.¹⁰

Adam Smith may have been right in pointing out that management of a business enterprise by a corporation is not as efficient as the management he was familiar with; that is, of individuals, firms, and partnerships. Drucker, however, shows that large-scale enterprises are a vital and necessary phase of modern society. Certainly we, interested in the field of mass transportation, must accept the latter and modern-day view. It is clear that the modern private enterprise corporation, managing a large-scale business such as a large American railroad, can and does do a better job than would be done by any form of government authority, executive, corporation, or department. There are theoretical and practical obstacles that make government operation less efficient and less desirable than private operation.

However, in four major ways a governmentally operated enterprise suffers in management efficiency and ability as compared to the work done by a private corporation. These management defects are theoretical and practical objections to nationalization of business enterprises, of the greatest importance. These are:

1. The duplications, frustrations, and multiplications of effort caused by the addition of upper-echelon management levels.
2. The quarrels, loss of top managerial skill, and deadening effects of placing at the top of the enterprise a public trustee or a group of public trustees.
3. The increase in working forces and decrease in managerial skill due to placing within the organization so very many functional compartments, each with a fenced line of decisions around it, and each poised like a rattlesnake to warn or strike at any luckless employee or supervisor who tries to do his work too close to the fence of functional jurisdiction.
4. The absence of the wholesome effects upon an enterprise of the necessity to compete with like enterprises. There is no need, within gov-

¹⁰ Excerpt from *British Steel at Britain's Service*, p. 3, published by the Labour Party.

ernment enterprises, to strive to be the most efficient or to render the best service. Management apathy replaces the morale of competitive striving for success.

My colleague in presentation of these two papers, Dr. G. Lloyd Wilson, has presented in his discussion the history of nationalization of British transportation together with his critical appraisal of the reasons why this nationalization from the standpoint of employees, shippers, and the public is undesirable and should not serve as a pattern to be followed in the United States. In my presentation it has been shown that there are basic theoretical reasons from the standpoint of management and organization of an enterprise for the long-observed propensity towards poor quality management inherent in government ownership and operation. Analysis of the beginnings of British experience with full-fledged ownership and operation, together with the testimony as to an older experiment in nationalization of railroads in Mexico, indicates that these criticisms have appeared and are present and will develop in Great Britain. It is my hope that the American public and American economists will recognize these defects and will work shoulder to shoulder to maintain, improve, and perpetuate private enterprise ownership and management of American mass transportation.

THE REORGANIZATION OF TRANSPORT REGULATION¹

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The remarkably flexible transportation system now serving the nation is the product of a unique joint undertaking. Government through promotion and the supply of new capital has played a leading role in the rapid development of new media. At the same time it has broadened regulation in an effort to maintain stability of competitive rates and services. With one exception, however, the government has not engaged in the business of selling transportation services to the consumer. This has been reserved for private enterprise.²

Although the combined efforts of government and private enterprise have produced abundant transportation and have converted quasi-monopoly organization to pervasive competition, the end result has not been entirely satisfactory. As matters now stand there is no assurance that adherence to current policies will achieve the declared objectives of national policy. There is even less assurance that future programs will produce improvement of service at the lowest total economic costs.

American railroads, despite high levels of traffic, improved capital structure, and large capital outlays for modernization, are operating on a thin margin of safety and have not succeeded in restoring their credit position. Coastal and intercoastal shipping has made only a faltering recovery from wartime dislocations. Intercity trucking, although experiencing rapid postwar growth, gives evidence of overexpansion into the areas of its least comparative efficiency, as well as signs of considerable internal instability. The airlines, despite government benevolence, have developed, a rigid capital structure and an operating pattern of weak and strong elements. Only the pipe lines and intercity bus operations appear to be free of any major elements either of short- or long-term weakness.

Government alone is, of course, not responsible either for the observed deficiencies or the progress achieved. However, some of the major factors in the unpromising outlook stem from public action. In final analysis, lines of authority and responsibility have become so confused that neither public authority nor private management can be held firmly accountable for maintaining a progressive transportation system.

Detailed discussion of the revisions in over-all transportation policy

¹ This paper is based in the main on *National Transportation Policy*, by Charles L. Dearing and Wilfred Owen, published by the Brookings Institution, 1949.

² The government owns and operates the Inland Waterway Corporation providing barge service on the Mississippi River and its tributaries.

that appear desirable in the interests of economy, unity of purpose, and administrative efficiency would overrun the bounds of my assigned topic. It should be kept in mind, however, that correct evaluation of regulatory deficiencies can be made only within the complete framework of government action. From this perspective, the national government's regulatory program appears to be deficient in at least three respects:³ (1) functions are improperly allocated between independent commissions and executive agencies; (2) regulation has not been adapted fully to the competitive era; and (3) promotional programs threaten to undermine the basic concepts and application of public regulation.

I. Improper Allocation of Functions

The so-called "independent commission" form of administration was conceived as a means of attaining impartiality, continuity of policy, and expertness in the administration of governmental controls. It has made its chief contribution by insulating fundamental decisions affecting transportation rates and operating rights against the importuning of private pressure groups and the vicissitudes of politics. In recent years, however, two major weaknesses have developed: (1) commissions have been given tasks that can be performed equally well or better by executive agencies; (2) they have been assigned duties that are inappropriate for the deliberative form of public administration.

Functions Better Administered by Executive Agencies. In the effort to preserve an enviable record of impartiality and to deal intelligently with the bewildering technical and economic aspects of rate and service control, the regulatory process has become time-consuming, costly, and legalistic. Without exception, the commissions complain of the burden of work and the overwhelming pressure of detailed records presented for their consideration. As a result, dockets are clogged and the pressures for deciding individual cases become so compelling that there is little time left for the basic function of programing and policy making. It seems axiomatic, therefore, that responsibilities not essential to the regulatory process should be performed elsewhere. Railroad, motor carrier, and air safety regulation, and certain aspects of railroad car service administration fell into this category. Such administrative and enforcement activities could be removed from the regulatory commissions without damage to their essential functions. Moreover, there are positive reasons for administrative correlation of these functions with other executive programs.

³ Because of space limitation, this paper does not deal with the internal organization of commissions, the selection and competence of personnel, or such administrative functions as budgeting, the flow of work, and record keeping. These factors, of course, have an important bearing on the quality of regulatory performance.

Functions of the Interstate Commerce Commission relating to highway safety are technical in nature and can be administered effectively only through continuing co-operation with the states. Adequate machinery for this type of co-operation exists in the Bureau of Public Roads. For, in carrying out the federal aid program, the Bureau deals continuously with the states and conducts studies of traffic patterns, motor vehicle operating characteristics, and highway design. Safety regulation and enforcement techniques must be based on such data for they reveal the chief elements that condition highway safety. It would, therefore, appear that federal responsibility for highway safety should be integrated with administration of the federal aid program.

There are also positive reasons for transferring to an executive agency all ICC car service functions except those directly related to discrimination. The purpose of these controls is to assure an efficient distribution of railroad cars among regions and shippers under emergency conditions. But the regulatory mechanism has proved inadequate to deal with the problem of railroad car supply in periods of critical and prolonged shortage. Thus during the past war this responsibility was delegated to the Office of Defense Transportation, a temporary executive agency. Transfer of car service administration to an executive agency having continuing transportation responsibilities would provide the type of organization required for effective discharge of this responsibility when the service is of critical importance.

Activities That Are Inappropriate for Performance by Independent Commissions. A major defect in current organization is found in the fact that regulatory commissions have been assigned functions that are either executive by nature or alien to the deliberative form of administration. The major functions of the Maritime Commission fall into the former class; and the route-planning and consolidation functions of the Civil Aeronautics Board and the Interstate Commerce Commission are illustrative of the second classification.

The 1940 transfer of jurisdiction over coastal and intercoastal shipping from the Maritime Commission to the Interstate Commerce Commission left the former agency with only minor duties of a strictly regulatory character. The major current function of the Maritime Commission is the administration of the operating and construction subsidy programs for ocean shipping and the chartering and custody of vessels. These activities are basically promotional and managerial in nature. Moreover, the objectives of the program are closely related to national defense and the conduct of foreign policy, both legal responsibilities of the executive branch of the government. It is, therefore, inappropriate to lodge such responsibilities in an independent commission where the objective is to prevent direct control by the chief executive.

In addition, the commission form of organization is an inherently defective mechanism for carrying out large-scale programs that require expedition, flexibility, and business acumen. For these reasons, it appears that the Maritime Commission should be abolished and its major functions transferred to an executive agency. The few remaining regulatory functions could appropriately be transferred to a unified transport regulatory commission.

Nor has the commission form of organization made a distinguished record in the field of long-range programing and planning. The ICC, for example, was never happy with its mandate to formulate a general plan of railroad consolidation and in 1940 was relieved of that obligation. General agreement exists with respect to the need for modernizing the railroad plant through a more efficient and better balanced grouping of the operating units. But there is no agreement as to how the objective can be attained in the face of the strong vested interests in the existing railroad operating structure.

It appears, however, that a master plan for railroad consolidation is indispensable to any sensible treatment of the problem, for the validity of an individual consolidation proposal can be gauged only by reference to an over-all plan indicating the most desirable operating relationships between each of the affected railroad units. Moreover, it would be sheer folly under modern conditions to promulgate a long-range plan for railroad consolidation that is not officially integrated with the federal government's promotional programs to improve the range and quality of highway, air, and water services. There can be no permanent value to any consolidation plan that does not take full cognizance of these competitive implications. For these reasons, and also in view of the fact that the commission is temperamentally averse to long-range planning, it would appear wise to transfer this responsibility to an executive agency of government having responsibility for the programing of all transport facilities. Jurisdiction over the approval or disapproval of individual consolidation proposals made within the framework of the general plan could be left with the regulatory commission.

The efforts of the Civil Aeronautics Board to plan an efficient route pattern for air transportation represents another type of activity that has not worked out well in the commission form of administration. Under the Civil Aeronautics Act of 1938, Congress gave the Board plenary powers over the right to establish or alter air routes. The objective was to avoid the monumental mistakes that had been made in the early period of railroad development. The new and rapidly expanding air transportation industry was to be guided by government in such a way as to avoid excess and duplicating facilities and the corollary instability of rates and service.

During the first ten years of its existence, the Board devoted itself almost exclusively to this task. The fact is, however, that in a remarkably short time air transportation has become afflicted with the familiar infirmities of overexpansion, uneven earning power, and a progressively heavier burden of fixed charges. There are two underlying explanations for this anomalous result. First, the Board has a mandate to promote the development of air transportation with the use of financial subsidies if necessary. The law specifies that such development shall be along sound lines and that management of the aided industry shall be honest and efficient. But it is silent on the standards of measurement to be applied. It offers no suggestion as to how air transportation is to be fitted into the over-all competitive pattern. Under such circumstances the natural tendency is for an exuberant outlook to dominate the decisions of management and regulators alike. Subsidy payments are available to support any excess capacity that may develop through erroneous projections of demand for service.

In any ordinary self-supporting enterprise, management is motivated by a desire to preserve capital and realize a return at least equal to what might be expected from some alternative use. And wisdom in the regulatory process usually stems from a detached and impartial attitude toward the regulated enterprises. The availability of subsidies combined with a promotional emphasis relaxes these disciplines and tends to distort managerial decisions and the exercise of regulatory discretion.

The second explanation for the miscarriage of legislative intent in the field of air transportation is found in the antipathy of commissions to long-range planning. Thus, as in the case of the ICC and railroad consolidation, the CAB has not been guided by any general plan for the development of air transportation. It has permitted the route pattern to evolve through case-by-case decisions. This conclusion appears inescapable, for it is unlikely that any responsible agency would deliberately have planned an operating structure which produces a rate of return ranging from 7 to 36 per cent on capital invested by the so-called "Big Five" carriers. The disparity in earning power is even greater if allowance is made for the smaller trunk lines and feeder routes.

For these reasons it would appear wise to abandon the subsidy program for domestic air carriers and transfer route planning to an executive agency of government. The decision to place air transportation on a self-sustaining basis would clear the way for a unified and consistent program of transport regulation. Rate and service regulation for air carriers could then be combined in a single commission with that applicable to other media, for uniform standards of rate competition,

discrimination, and the public need for service would govern all agencies engaged in the domestic movement of goods and people. This revision of Congressional policy and administrative reorganization would make it possible to develop air transportation as a co-ordinate rather than a specialized or preferred branch of the transportation system. The change might also restore the necessary disciplines for prudent and efficient private management.

II. Regulation Has Not Been Adapted Fully to the Competitive Era

There has been a curious inversion in the development of regulation in this country. In some instances controls have been established long after the period of critical need. For example, the ICC was not given power over the extension and abandonment of railroad lines until 1920, some forty years after the era of railroad expansion. In other cases, regulation appropriate to the control of monopoly situations has been carried over into the present competitive era. ICC supervision of the general level of rates is illustrative of this case.

The net result is that government continues to exercise major functions of railroad management, presumably on the theory that the carriers retain the power of monopoly pricing. The operating facts of modern transport organization do not support this assumption, for the railroads are faced with aggressive competition from private automobiles, trucks, airlines, pipe lines, and waterways. There are few categories of freight haulage that are not subject to such competition and none in the field of passenger service.

Nevertheless the present rule of rate making gives the Interstate Commerce Commission power to substitute its judgment for that of management in the formulation of general pricing policy. The Commission takes endless testimony on such questions as to whether a particular rate adjustment will benefit the rail carriers or their competitors, the effect of rate adjustments on the general level of prices, and the relative ability of particular industries to absorb rate increases.

Damaging delays have resulted in the treatment of postwar general rate cases. Although the Commission eventually granted substantially the amount requested in each of the three major advance freight rate cases, the time lags involved have subjected the carriers to sharp distortion in cost-price relationships. For example, a full year elapsed between the time the railroads felt the full impact of 1946 increased labor and material costs and the date on which they were permitted by the ICC to increase freight rates by anything like a corresponding amount.

It will be recalled that in April, 1946, the Railroad Operating Brotherhoods received an arbitration award granting increases in hourly wage rates aggregating over 600 million dollars annually. Most of the in-

crease was made retroactive to January 1. Although the carriers filed application on April 15 of that year for compensating advances in the general level of freight rates, final decision allowing an increase of approximately 17.5 per cent was not made until December 5 and did not become fully effective until January 1, 1947.⁴ As a result of the growing distortion between revenue and income, the carriers in that year realized a return of only 2.75 per cent on their net investment, despite near-capacity operation. During the same period other industries maintained a favorable cost-price relationship by adjusting prices promptly to compensate for rising labor costs.

Again in 1947 the relief requested by the carriers in *Ex Parte 166* on the basis of September, 1947, labor and operating costs was not realized until May 1, 1948,⁵ a lag of about eight months. And the "final" report in that case was not issued until July 27, 1948—almost eleven months after the original petition was filed.⁶ A similar pattern of lag between rising costs and rate adjustments occurred during 1948 (*Ex Parte 168*).

The conclusion appears inescapable that these regulatory delays were responsible in no small measure for the relatively poor financial showing by the railroads in the immediate postwar period, for all other factors were favorable. With the exception of declining passenger traffic, demand for railroad service remained at unprecedented peacetime levels. The burden of fixed charges had been substantially reduced and the railroads' chief competitors had not fully recovered from wartime dislocation.

It would, therefore, seem desirable to give the rail carriers more discretion and flexibility in pricing their service. At the minimum they should be afforded the opportunity to compensate promptly for increased costs and to try for high earnings when the economy is operating at capacity. Otherwise their financial outlook for the long pull is indeed unpromising. A start in the direction of restoring a measure of discretion and responsibility to management could be made by withdrawing the Commission's obligation to consider the effect of general rate adjustments on the movement of traffic. Under highly competitive conditions this type of determination would seem to fall appropriately within the province of managerial judgment.

III. *Conflict Between Promotional and Regulatory Policies*

Some of the most critical defects of national action in the field of transportation arise because the results of subsidization run counter to

⁴ *Increased Railway Rates, Fares, and Charges*, 266 I.C.C. 537.

⁵ *Increased Freight Rates, 1947*, 270 I.C.C. 93.

⁶ *Increased Freight Rates, 1947*, 270 I.C.C. 403.

the objectives of regulation. Continuation of this situation threatens not only to undermine the moral foundation of public control but tends to make competition unworkable.

From the outset the statutory requirement that public carriers shall charge only "fair and reasonable" rates has constituted the core of public regulation. The objective is to make the transportation system function as an impartial service agency. Preferential rates are not to be used either by government or private enterprise to give special advantage to one region or sector of the economy. Yet government transport subsidies have introduced an insidious type of discrimination. In effect, government-created discrimination has been substituted for that formerly exercised by private monopoly. Such discrimination arises because the government distributes its financial aids unevenly among regions and types of carriers. One of the most glaring examples is found in the promotion of water transportation.

For years the federal government has provided improved waterways without direct cost to the users. Because of the physical limitations of water transportation, the assumed benefits of these expenditures can be realized directly only by the shippers that have access to improved waterways. In order to obscure the regional preference involved, Congress has in effect required the railroads to serve as the vehicle for distributing waterway subsidies to interior points. Thus the ICC has recently found that Congressional policy requires the railroads to establish joint barge and rail routes on the Mississippi River and its tributaries at rates lower than for similar all-rail movements.

The net result is the diversion of traffic from the railroads to the subsidized water operation or erosion of the railroad rate structure. Shippers who are in a position to use this subsidized joint service gain a competitive advantage over other shippers who must continue to use all-rail service to the same markets. The advantage arises only because the general taxpayer foots a part of the transportation bill.

In the attempt to carry out these conflicting policies, the ICC is placed in a peculiar position. With the one hand it must administer a law dedicated to nondiscrimination. At the same time, the Commission is obligated to carry out another policy which deliberately subsidizes favored shippers, regions, and forms of transportation. Manifestly, no agency can be expected to administer, with equal impartiality, two Congressional policies that are inherently contradictory.

We must conclude, therefore, that if Congress wishes to correct this situation, it must assess against the user rather than against the general taxpayer the major cost of providing transport facilities. This is required not only to give integrity to the concept of public regulation but to make possible the maintenance of workable competition.

It will be recalled that a major objective of the Interstate Commerce

Act is the maintenance of fair competition. The purpose is to afford each transport medium an opportunity to find its sphere of usefulness on the basis of relative efficiency and quality of service. Consumer choice, guided by rate and service competition, is expected to allocate the available traffic equitably among the several forms of transportation. Despite this avowed objective, the federal government has failed to provide the economic environment essential to the operation of "workable competition."

An effective pricing mechanism, of course, constitutes the mainspring of a competitive system. When that mechanism is distorted by private or government interference, competition becomes unreliable as the arbiter of economic survival. Consequently, rate competition cannot be depended on to divide traffic among competing agencies in accordance with relative economy unless the rates under question reflect true economic costs.

But the fact is that the "costs" with which the commissions deal in rate regulation are not comparable, for the rates of some agencies must cover total economic costs while others reflect varying portions of such costs. The rate structure of the railroads and pipe lines must, of course, produce revenue to pay all operating expenses plus sufficient net income to meet interest charges and provide for new capital requirements. Other carriers—notably water operators and airlines—are able to offer service at rates which cover only a portion of total costs because they use publicly financed facilities.

When several agencies are competing for a given volume of traffic under such circumstances, the one striving to recoup total costs will inevitably lose traffic. Manifestly, no self-sustaining enterprise can permanently survive this kind of subsidized competition. The situation repels risk capital. For example, under current national policy neither railroad management nor prospective investors can gauge with any accuracy the future scope of the government program for assisting other transportation agencies.

Until 1944, for example, it appeared that the federal role in highway development had become fairly well stabilized at about 125 million dollars annually. Since that time, however, yearly appropriations for highway improvement have been increased to about one-half billion dollars. Also, eligibility for such funds has been extended from a limited federal aid system to include city streets and secondary roads. Appropriations for river and harbor improvements continue to mount. Moreover, the proponents of aviation are urging billion dollar federal expenditures for improved airports and airways. None of these expenditure programs carries any terminal date nor any specific policy of self-liquidation.

Under such circumstances, new risk-capital is not likely to flow into

the privately-owned sector of the industry, for policy declarations in favor of impartial regulation and fair competition cannot as a practical matter prevent the uneconomic allocation of traffic and the resultant drain on the financial strength of the self-supporting enterprises.

The only solution is to eliminate the trouble at the source by requiring the beneficiaries of publicly provided transport facilities to pay the cost in the form of user charges. There is no other way to achieve an economic allocation of traffic among competing agencies in view of the fact that it has been found both desirable and necessary for government to provide some types of transport facilities. Prior to enactment of the Federal Aid Act of 1944 we had approximated the principle of user support in the field of highway transportation. A faltering start has been made in air transportation, but the inland waterways remain in their traditional position of undisturbed subsidy.

An essential requirement, therefore, is for the national government to determine whether it wishes to treat uniformly all competitive forms of transportation or to give special preference to selected agencies. Unless Congress faces up to this difficult and unpalatable task, reorganization is not likely to produce constructive results. The mere shuffling of functions among commissions, bureaus, and departments will produce neither economy nor co-ordination of transportation policy.

It should be noted that the nation's shippers and political leaders apparently do not want outright government ownership. Nevertheless, it appears that the drift in that direction will continue unless Congress finds the will and means to restore a workable balance between the powers of government on the one hand and the responsibilities of private enterprise on the other. National policy makers cannot expect private enterprise to supply indefinitely the necessary managerial drive and new capital in an environment that bristles with contradiction, uncertainty, and apparent hostility.

DISCUSSION

VIRGIL D. COVER: What does the British approach to the transportation problem mean to us? If it works well as the years go by would it be fair or logical for us to say we ought to follow the British example? If it fails, or works not too well, would it be fair or logical for us to conclude that nationalization is "not for us"? The answer to both questions is fairly obvious, or at least it is to this discussant, for conditions in Great Britain do differ greatly from those in this country. They differ in terms of geography and size, in the resources at the command of the British people, in the differences existing in each country as the result of the war, and apparently in the hopes and mental outlook of the two peoples.

Be that as it may, it would be difficult to observe the British experience and avoid considering it a sort of test-tube experiment the results of which should provide some indication of what we might expect if a transport act were to be passed by Congress. Thus far, of course, we are unable to appraise the results in Great Britain for the simple reason that any such plan deserves several years' operation under varying conditions, but we may be forgiven if we grasp eagerly at any scrap of information we may get. The financial results thus far have not been as favorable as those for which the Labour Party may have hoped, but neither have they been favorable for the United States railways under our system of private ownership and operation. The British found it necessary to raise railway rates; so did the railways in the United States. British railway labor asked for higher wages; so did railway labor in the United States; and if labor were to make its choice on the basis of improvement in its position since the war, it seems obvious that private ownership and operation has much to commend it. There have been complaints of the quality of railway service in both countries, but in Great Britain the fact of a great amount of war damage would have been a sufficient reason for poor service for some considerable period following the war. The possibility (or probability) that the interests of the railways might run counter to those of highway transport and that private trucking might increase has been discussed in both countries. In the United States both rail and highway transport have their champions and they may be counted on to be very active in advocating their interests before Congress. In Great Britain the degree of advocacy is limited because of the arrangement under which the British Transport Commission is directed to carry on all the businesses in which it is engaged as one undertaking. Even here it does appear that a strong executive might turn out to be an advocate no matter how the law might be written. Much depends on the extent to which the analysis of Mr. Plowman concerning the deterioration of employee morale and the problems of securing competent administration are applicable.

One feature of our transport situation in the United States which gives reason for hope that we may continue with private ownership is that there is a great deal of interest in the transport problem. Within the last few months there have appeared the Brookings study, the Harvard study, and the report

of the Secretary of Commerce to the President—all of which have been analytical and all of which have made recommendations. In addition, the railways have embarked on a very substantial program to inform the public of their problems and their proposals for solving them. The highway transport industry, especially the trucking portion of it, is endeavoring likewise to inform the public of its problems. Unfortunately much of that which the public is being asked by these two industries to believe has not been established as a fact. In these days when matters of international security are so all-important to the public, it is probably too much to ask that the public should take very seriously the differing points of view of two advocates on a domestic transportation problem. Interestingly enough, the air transport industry, apparently feeling secure in its position, has thus far remained out of the arena, and it probably hopes that it will not be required to enter it.

That the health of the transport industry in the United States is not all that might be desired will be admitted by everyone. Not everyone will agree, however, on what are the reasons for the poor state of health. If the question were asked whether or not the extension of subsidy to one industry makes difficult the operation of its competitor, there is little likelihood that the answer would be anything but yes. If the question were asked whether or not motor transportation be subsidized, the answers might be yes, no, or anything in between. If the question were asked whether or not the extension of a subsidy to the trucking, the airline, or the water transport industry is likely to require government ownership of the railways, the answer would depend on the financial condition of the railways. This financial state may be the result of one or many factors, in addition to the extension of subsidy: an indifferent demand on the part of the public for railway service, indifferent because competitors offer a better transportation bargain service-wise or rate-wise; poor railway management; an inadequate contribution on the part of labor by comparison with the compensation labor receives; a poorly-conceived regulatory framework; a national defense policy which presents advantages to one transport agency while another is taken for granted; and other factors.

At the very least it appears that the transport situation at the present time is due for another comprehensive examination. Even long-time students of transportation are so far from being in agreement on so many problems which are fundamental and so much information is being passed out which must include elements of misinformation that the time is overdue for the issuance of conclusions on which reliance may be placed. The transportation problem will always be an interesting one and a troublesome one. If government ownership comes, the problem could hardly help losing much of the interest it now has for its students. For us who do follow it, that might be one reason for avoiding government ownership, but more basic reasons are to be found in the papers which provided the reason for this discussion.

HAROLD W. TORGERSON: Dr. Wilson and Dr. Plowman, in excellent papers, indicated a belief that a system of private ownership and operation is conducive to greater operating efficiency than government ownership and operation. With this point of view I heartily concur.

Dr. Wilson, after tracing the steps in nationalization of transport facilities in Great Britain, stated the consequences that he would anticipate if there is a similar development in the United States. In his list he mentioned that shippers might lose the right to select the means of transportation and to route freight, that political rate making might follow, that the right to move freight in private means of transportation might be limited, and that costs of operation would probably increase. The latter point, in effect, was the major theme of Dr. Plowman's paper. Dr. Wilson also made suggestions on how nationalization might be averted in this country.

As the central theme of this meeting of the American Economic Association is "a stocktaking of American capitalism," I would like to point my comments toward the problems of socialized transport, and how we may avoid such a development. To the list which has been presented, I would add that under federal ownership it is unlikely that rates would be adjusted quickly to increases in costs, and operations would soon be conducted at a loss. Our current experience with the Post Office Department and the Inland Waterways Corporation supports this statement, as does also the financial record of the British Transport Commission in 1948 and 1949. With local and federal tax collections currently absorbing about 59 billion dollars of our national product of 247 billion, any increase in taxes to cover such a deficit would be very burdensome.¹ A related point is that federal ownership would likely be accompanied by a sharp decrease in property and other taxes currently paid by transport companies to municipal governments. This would heighten the financial difficulties of many school districts, cities, counties, and other local units. This problem would be of greater significance in the United States than it was in Great Britain because local taxes in this country have comprised a larger proportion of total taxes collected.

In discussing how socialization may be averted, Dr. Wilson mentioned the difficulty of railroads in raising additional capital. He saw a dilemma in that they are unable to attract funds through sale of common stock, and if they borrow, the additional fixed charges incurred may cause default and bankruptcy. This statement applies to most railroads. However, some railroad companies can raise funds through the sale of common stock if they desire. But the current cost of equity funds for all corporations tends to be high relative to the cost of borrowed money because of the greater risk, the nature of our income tax laws, and the restrictions against investing funds of financial institutions in stocks. The improvement in the financial position of the railroad industry since 1940 has been substantial and should not be overlooked. The Railroad Securities Committee of the Investment Bankers Association was recently reported as chiding railroad officials for painting a "bluer picture than necessary for the purpose of arousing public sympathy for their cause."² The quick sale of a block of 100,000 shares of Chesapeake and Ohio stock a few weeks ago indicates a market for railroad equities. My point, then, is one of clarification. Some railroad companies, like certain industrial companies, have a choice of alternative methods in raising funds. The tendency today,

¹ *National City Bank Monthly Letter*, October, 1949, p. 119.

² *Wall Street Journal*, December 10, 1949, p. 2.

however, is to sell debt instruments because the cost is much less than when funds are obtained through the sale of stocks.

There is some doubt in my mind as to whether the railroads view the threat of nationalization very seriously. If they wish to erect bulwarks against this, some other constructive steps may be suggested in addition to those listed by Dr. Wilson. First, reduce the number of railroad companies through consolidations or lease arrangements. The economies that would follow through more direct routing, through reductions in interline accounting and traffic solicitation, and through abandonment of unnecessary facilities and routes seem obvious. In certain cases the creation of larger systems would not be to the personal advantage of officials of some of the constituent companies. This may account, in part, for the lack of substantial progress along this line. The recent leasing of the property of the Wheeling and Lake Erie Railway Company to the New York, Chicago and St. Louis Railroad Company was a move in the right direction. Railroads might improve their public relations by eliminating some of the complexities of rate structures and rate publications. Service might be improved by establishing additional joint routes with other forms of transportation. A final suggestion is to initiate personnel policies which will attract and retain in the business phases of the industry a greater number of young men of superior ability.

The slow but steady movement in the direction of nationalization of transport and other industries should be apparent. If it is to be stopped, the concerted efforts of all believers in private enterprise will be required.

HAMPTON K. SNELL: Basic difficulties inherent in the separation and dispersion of interstate regulation of the various forms of transportation among several agencies have been effectively emphasized in the paper, "The Reorganization of Transport Regulation."

Some of the same difficulties were developed during the past several years by the work of a subcommittee of the House of Representatives Committee on Interstate and Foreign Commerce, which appeared to show that the consensus of students and users of transportation favored more unified regulation.

On December 1, 1949, the Secretary of Commerce, in "A Report to the President: Issues Involved in a Unified and Co-ordinated Program for Transportation," emphasized most of the present deficiencies of regulation. While many recommendations were left on an "open to more study" basis, the report urged that attention be paid to the results of nonunity of regulatory policy, duplication of facilities, and evils of excessive competition.

A special group under the direction of the Senate Committee on Interstate and Foreign Commerce is considering questions of transportation policy, as are such private organizations as the Transportation Association of America.

Little doubt, therefore, seems to exist that something needs to be done about the regulatory ills of the present. The real problem is, what is to be done?

In recommending transfer of certain functions, such as safety regulation and car service administration, to some to-be-created executive branch of government, Mr. Dearing shows more faith in bureaucratic efficiency than this writer possesses.

At present the ICC has delegated a considerable portion of its powers over railroad car service to a bureau of the Association of American Railroads, thus tending to remove the function from possibility of delay to other ICC activities. The A.A.R.'s difficulties, along with those of the Office of Defense Transportation, in the car shortage periods of 1942-45, and especially 1945-48, are illustrative of those complexities of transport problems which cannot be ascribed entirely to regulatory defects. Among the reasons were: errors of management preceding the war, the results of financial starvation of the thirties, breakdown of overaged equipment, unwise governmental policies of restriction during the war, peacetime steel shortages, incomplete standardization of equipment, industrial and employee slowdown in productivity and five-day weeks—which all combined to create a "crisis" accompanied by political uproar, accusations of managerial and regional favoritism, and the usual minute results. If policy making had been located in some other bureau, would the results have been any different?

This very matter of car supply emphasizes the problem mentioned in the principal paper—that of infringement of government on private managerial prerogatives. Some months ago the ICC proposed certain elaborate signaling installations for the railroads under the label of improved safety and caused a storm of railroad protest, chiefly upon the grounds of unnecessary expense but circling about the debate of managerial versus bureaucratic functions. Where exactly does one leave off and the other begin? Would Congress, previously unwilling to commit itself upon a valuation formula, rate-making formulas or almost any other fairly precise regulatory process, be willing to declare itself upon this subject?

The suggestion is made in the paper under discussion to give greater freedom of rate-making powers to the railroads to achieve more managerial initiative. Mr. Dearing probably does not advocate lifting minimum rate restrictions, but if such freedom were granted, what would happen in this case?

Because of suspension of ocean tanker service during the war, the eastern half of our nation was acutely short of petroleum products. Tank cars were rushed into long-haul service from the southwest to the east and government orders forbade them in short hauls, mostly less than 50 miles but not less than 200 miles in Texas. As a result of this policy, a whole new highway tank truck industry was born and is still flourishing, with an investment in Texas of well over 5 million dollars, gross income of more than 10 million dollars annually, and thousands of employees. The railroads propose a petroleum rate structure so designed that, if allowed to go into effect in 1950, it could destroy the highway tanker industry for distances over 50 miles by virtually eliminating its profits. Any possible losses to the railroads in handling the regained traffic would obviously have to be borne by commodities whose rate structure was not reduced for fighting purposes. This very real problem was created by government policy and is one which must be decided in the arena by government. Would allocation of the function to a super-bureau, probably composed of ex-Missourians, be likely to settle it any more equitably?

Yet another example recently came to my attention in air transport regulation. In pursuit of its promotional policies, CAB promulgated the feeder line

program, granting temporary certificates to a multitude of experimental heavily subsidized airlines. One Texas company invested over 1 million dollars in equipment and facilities, hired several hundred employees, and achieved in 1948 over 2 million in revenue, 52 per cent of which was government air mail pay. My analysis of the company indicates that, although it is efficiently and economically operated, it is unlikely in the foreseeable future that it will be able to exist with less than 40 per cent of its revenues from subsidy, compared with less than 5 per cent for such a line as Eastern. The question CAB must answer: now that this enterprise is functioning, shall government continue to keep it alive, and if so, for how much and for how long?

The particular airline hauls more than a thousand passengers per month between Austin, the state capital, and Houston, the largest city in the state. In 1949 the Southern Pacific Railroad requested and was reluctantly granted permission to suspend one-half of its already meager passenger service between those two cities, thus leaving a total population of over one million and two growing and important metropolitan areas with one poorly scheduled passenger train per day as total rail service.

Undoubtedly one of the factors in such suspension of service was diversion to the subsidized airline. While one may argue that the railroad by purchase of new equipment, proper scheduling, advertising, and pricing could probably regain much if not all of the lost traffic and could even make a profit, the fact remains that the service is gone and the highways and airlines have it. Would policies responsible for such an event have been any different if evolved by a branch of the executive departments of government?

This discussion should not be interpreted as disagreeing with any conclusions that greater unity of regulation is drastically needed. My purpose is primarily to emphasize that not only is such a step needed but that the process of achieving it is difficult, complex, and will require years of patient effort.

The consolidation panacea of the twenties was defeated by combination of several factors: hesitation by the ICC, opposition of labor because of potential job losses, indifference of railroad management, and difficulty of securing a balance among consolidated systems.

Co-ordination was the watchword of the thirties. Again it accomplished little because of opposition of vested interests—primarily labor in writing into the law itself an emasculating restriction on the co-ordinator's powers; secondly, lack of interest by railroad management itself which passively opposed changes until the office of co-ordinator ended; and finally to opposition and fear of other forms of transport to being overwhelmed by the railroads.

Despite the general recognition of the present that all is not well with the national transportation picture, again we find ourselves facing well-intrenched opposition. A recent release of the Transportation Association of America, dated November 28, 1949, purporting to show unity of desire by the spokesmen of various transport agencies to solve present problems, actually, it seems to me, clearly demonstrates instead the resolve of each to keep what position he has and yield not at all to anyone else. The airlines reaffirm:

... the airline industry is peculiar among U.S. business because of its unusually rapid expansion as the result of war-time development. It is unlike other forms of transportation. . . . It must stand on its own principles of operation and, eventually, it must pay its own way. Its worth to the nation in terms of emergency use for national security justify . . . a considerable outright subsidy. But the operators of our airlines are rugged individualists. They believe in free enterprise and the American system of business. They are primarily interested in the so-called subsidy portion of airmail pay only as a means of development, not as a means of sustenance.¹

The spokesman for the truck lines insists that:

... it is no solution to the problems of the railroads respecting diversion of tonnage to seek to return tonnage to the rails by artificial tax or weight restrictions. . . . I do not believe the only alternatives for the preservation of a healthy railroad industry are government subsidy, government ownership, or the blunting of the new tools of modern life provided by airplanes, bus lines and trucks.

There should be coordination possible between these competing agencies which have not yet been fully explored.²

The railroad spokesman states:

The railroad problem basically is the constant one of keeping revenue in some semblance of favorable relationship to expenses. The handicaps to it are these: (1) Railroads are regulated as to what to charge for services and the manner of performing them; (2) they are confronted with a labor situation in which little or no recognition is given to productivity; (3) high costs of materials; (4) absence of real economy in federal, state and local government, and excessive taxation resulting; (5) inroads of competing forms of transportation, made possible at least in part by use of facilities provided at the expense of taxpayers.³

Other spokesmen insist their position requires unique treatment and no change in *status quo*. The various regulatory agencies now entrenched more or less securely fight vigorously against any major changes of function, responsibility, or location in the bureaucratic hierarchy. Until the processes of democracy, including all the efforts of the various pressure groups, have become strong enough and Congress "finds the will and means," the basic problem of nonunified regulatory policy and purpose will continue until some national emergency forces it into such prominence that it can no longer merely be studied. In the meantime, Mr. Dearing's efforts will serve to focus needed attention and to clarify national thought.

¹ Statement by Admiral Emory S. Land, President, Air Transport Association, quoted in *Partners in America*, Vol. III, No. 10.

² Statement by B. M. Seymour, President, Associated Transport, *ibid.*

³ Statement by A. J. Seitz, Executive Vice President, Union Pacific Railroad, *ibid.*, p. 3.

CAN CAPITALISM DISPENSE WITH FREE LABOR MARKETS?

LABOR MARKETS: THEIR CHARACTER AND CONSEQUENCES¹

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A double life has developed for the term "labor market" and this has been the source of much confusion. Some economists employ the term in one sense; some in the other; and some in both at the same time without realizing or acknowledging the actual or potentially different meanings.

The Wage Market and the Job Market

Two processes, among others, are going on all the time in our economy: wage rates are changing and individuals are moving among jobs. The two processes may or may not be closely connected. It is out of their changing degree of association that the confusion develops.

Conventionally, in wage analysis, the labor market is the totality of jobs for which, given the achievement of equilibrium and an allowance for "other advantages,"² the same wage is paid. It is the area within which the single price pertains. Local labor markets are separated by costs of movement, which result in price variations. Granting that some imperfections exist, the labor market is the area within which the single price would exist if the imperfections did not interfere. The labor market sets the price. This is the economists' traditional view.

There is another sense in which the term is used, more particularly by employer, union, and government administrators but also by economists. The labor market is the area, defined occupationally, industrially, and geographically, within which workers are willing to move and do move comparatively freely from one job to another. Movement within the area is fairly easy and customary; and migration into it or out of it is less frequent and more difficult. The market is defined by resistance points on the scale of mobility. There are a multitude of markets and more than a single price may be paid in each; and a single price may cover more than one market, although each of such markets may be otherwise quite different. The market is the mechanism which distributes jobs.

¹ Carl Campbell and Lloyd H. Fisher were particularly helpful in the development of this paper.

² J. R. Hicks, *The Theory of Wages* (Macmillan, 1935), p. 7.

In this discussion, whenever a distinction is made, the first will be designated as the "wage market" and the second as the "job market"; and the two need not encompass in each instance the identical composite of jobs. In fact, it is out of their potential and frequently actual separateness that some of the more interesting and important problems evolve.

Models of the Market

The markets with which we are concerned may and do vary almost infinitely in structure and dynamics. Five general models or ideal types represent, but do not fully describe, the differences which are in kind as well as in degree.

1. *The Perfect Market.* This model is the accepted measuring device of economists. A "market place," in the historical sense, exists as a result of free entry and exit, complete knowledge, a sufficiency of relatively small and undifferentiated buyers and sellers, and the absence of collusion. Perfection is achieved if the product market also displays these characteristics; and the consumer reigns supreme in the allocation of resources and the determination of the rewards to individuals.

Under these circumstances, the dichotomy of the wage market and the job market does not exist. Physical movement of workers and the wage setting process are inextricably interwoven. The single price prevails and the market is cleared.³

Wages . . . tend to that level where demand and supply are equal. If supply exceeds demand, some men will be unemployed, and in their efforts to regain employment they will reduce the wages they ask to that level which makes it just worth while for employers to take them on. If demand exceeds supply, employers will be unable to obtain all the labour they require, and will therefore offer higher wages in order to attract labour from elsewhere.

2. *The Neoclassical Market.* Hicks considered the above "a good simplified model of the labor market. . . . Wages do turn out on the whole very much as if they were determined in this manner."⁴ It is, however, a "simplified model" and some minor amendments to it have often been deemed necessary in order to approach reality more closely. The "neoclassical market" emerges. It departs from perfection but still performs its economic tasks adequately.

This was the market as seen by Alfred Marshall.⁵ The supply of skilled workers is inelastic because of the extended period of time involved in acquiring skill. Unskilled workers are at a disadvantage because of the perishability of the service they have to sell. Unions exist

³ *Ibid.*, pp. 4-5.

⁴ *Ibid.*, p. 5.

⁵ Alfred Marshall, *Principles of Economics* (8th ed.) (Macmillan, 1938). See particularly pages 525-579.

but they are only sufficiently strong to offset market imperfections introduced by combinations, formal or informal, of employers. Workers do differ from one another.

Yet, all in all, the market is the main determinant of wages. Workers have sufficient knowledge of alternative opportunities and do, despite some inertia, move quite readily in the direction of net economic advantage. Wages may for a time be above or below the "competitive level" but over time they tend toward equality for workers of equal qualifications. Resource allocation approaches the optimum in the long run. While neither the product nor the labor market is perfect, the consumer retains his sovereignty. Adjustments, while not delicately made, are amply pleasing: all is for the best in the best of all possible worlds.

This model has frequently been held to be a fairly accurate description of reality:⁶

... for the general tendency for the wages of labourers of equal efficiency to become equalized in different occupations (allowance being made for the advantages and disadvantages of employment) has been a commonplace of economics since the days of Adam Smith. . . . The movement of labour from one occupation to another, which brings it about, is certainly a slow one; but there is no need to question its reality.

3. *The Natural Market.* Abundant evidence now testifies that it would, in the absence of collusion, be almost more correct to say that wages tend to be unequal rather than the other way around. The avalanche of wage data by occupations and by localities during World War II at first bewildered and later convinced War Labor Board economists. Occupational wage rates, locality by locality, in the absence of collective bargaining displayed no single "going rate" but a wide dispersion.⁷ Absence of a single price was found to be the general rule.⁸ A sure sign of collusion, not of the working of market forces, came to be the existence of a uniform rate. The market, it seemed, set rather wide limits and within these limits employers could develop policies as high-, medium-, or low-paid firms, and workers could accept high, medium, or low rates. Nonwage conditions of unemployment, such as welfare provisions, sick leave with pay, and so forth, were found to reinforce rather than offset the rate inequalities.

The explanation of the prevalence of this type of market behavior is, in part, the two contrasting views of the market of the economist and the worker. To the economist, the job market is an objective fact. It consists of those jobs among which the workers could pick and choose

⁶Hicks, *op. cit.*, p. 3.

⁷See, for example, Richard A. Lester, "Wage Diversity and Its Theoretical Implications," *Review of Economics and Statistics*, August, 1946.

⁸Allowance, of course, had to be made for the lack of identity of job specifications and worker performance, but rate discrepancies were too great to be explained away by these considerations.

and move without substantial cost for retraining or physical transference. To the worker, the market is much more ill-defined and subjectively described. It may consist only of other jobs within his own plant, or, more likely, those jobs about which he has information, largely from friends, and which fit his own conception of himself as to trade and income level. The worker operates within the market as he sees it, and his view is limited by lack of knowledge and a restricted conception of himself (particularly as to occupation).

Although the majority of the workers are vaguely conscious of the job market, they cannot be said to be actively in it.⁹ They are sufficiently satisfied with their current jobs or fearful of the uncertainties to be encountered in movement so that they are not weighing the advantages of other jobs as against their own. Unless ejected from their current jobs they are only passive participants in the market. Not only by choice but also by necessity is this the case, for many employers, as demonstrated by a current study of employer hiring practices in the San Francisco Bay Area, prefer not to hire persons employed elsewhere. From the point of view of the smooth functioning of the job market, they are the hard core of the employed. Some persons, however, are aggressively in the market—largely the unemployed and the otherwise unsettled workers (mostly the young). Their numbers are not normally sufficiently great or their conception of the market adequate enough to provide such volume of movement as would equalize net economic advantage.¹⁰

The natural market may thus be defined as one in which the average worker has a narrowly confined view of the market and, in addition, is not an alert participant in it. Unions do not exist. Employers, while not formally organized, either because of smallness of number or informal co-operation (the "tacit, but constant and uniform combination, not to raise the wages of labour above their actual rate" of which Adam Smith spoke¹¹), can exercise some monopsonistic influence in the labor market. Sovereignty is jointly held by the consumer and the employer. Wages are not set uniformly at the competitive level, and resources are

⁹ In a study by the Institute of Industrial Relations, University of California (Berkeley), of 935 heads of families in the Oakland labor market area, it has been found that among the employed only 13.5 per cent were actively interested in finding another job.

¹⁰ The business cycle affects both the number of people actively in the market and the workers' views of themselves. In a depression, more people are industriously seeking jobs and they define the range of acceptable jobs less strictly, but the market, objectively viewed, has greatly contracted. During a period of full employment, while workers contract their notions of suitable jobs, more jobs are open and uncertainty of re-employment is much less of a barrier to movement, so that, on balance, the market works more adequately; and it is during such periods, and particularly during periods of overly full employment, as one would expect, that rate spreads are narrowed.

¹¹ Adam Smith, *An Inquiry Into the Nature and Causes of the Wealth of Nations* (Modern Library Edition, Random House, 1937), p. 66.

not utilized to the best advantage. The operation of the job market does not determine wages but, rather, sets the limits within which they are fixed and influences the specific levels within these limits.

4. *The Institutional Market.* The institutional market is distinguished by the substitution of institutional rules for frictions as the principal delineator of job market limits; of institutional and leadership comparisons for physical movement as the main basis for the interrelatedness of wage markets; and of policies of unions, employers, and government for the traditional action of market forces as the more significant source of wage movements. Strong unions interested in policy and capable of having policies range alongside of large employers and employers' associations likewise interested in policy and capable of having policies. The purpose of these policies is, in fact, to curtail the free operation of supply and demand. The pertinent policies relate to the definition of job markets, the determination of rules affecting entry into, movement within, and exit from these markets, and the setting of wage rates. Formal rules, consciously selected, supplant informal practices determined by market conditions. Nor are policies solely developed by the private governments of industry and organized labor, but also by public government which may intervene to assure that monopoly encroachments do not entirely eliminate competition from the market, that wages do not fall below a given level, and that employment be maintained at acceptable levels.

This is, in its full-blown development, a relatively new kind of market in the United States and has assumed large-scale importance only within the past two decades. The wage market and the job market are substantially disjointed and can and sometimes do go their quite separate ways. For many kinds of labor there are no spatial boundaries within which it can be said that supply and demand considerations determine wages. Men find and lose employment within a restricted job market but the wage market is an orbit—"an orbit of coercive comparison."¹² This orbit frequently is spatially quite unlimited. It is the sphere of influence of organizations, policies, and concepts of equity. The job market area and the orbit of wage influencing considerations become quite distinct entities.

The job market no longer alone sets the upper and lower bargaining limits for wage determination. Its operation generally widens these limits, for institutional policies often make it harder for labor, and sometimes capital, to migrate and thus lower the minimum workers will accept and raise the maximum employers will offer since withdrawal is less possible. Customarily the more significant limits are set by the

¹² Arthur M. Ross, *Trade Union Wage Policy* (University of California Press, 1948), p. 53.

danger points at which the survival of leaders and associations and coalitions is threatened. Bargaining limits are fixed as much by political as by economic inducements.

Within these limits, it is not economic bargaining power by itself which concludes the settlement but also such largely noneconomic considerations as "patterns" and commonly accepted principles of equity. It is not so much what can be done economically which is important but what must be done politically—on both sides. Employers' associations and large corporations, as well as trade unions, have a political life which claims attention just as do the economic goals.

The wage rate under conditions of bilateral monopoly and bilateral oligopoly is economically indeterminate. "The theory of the determination of wages" is no longer, as Hicks said, "simply a special case of the general theory of value," for the "free market" no longer exists.¹³ If wages should be set at the competitive level, it would be by chance and not by virtue of any economic law.

The single price does usually exist but as a consequence of policy and not the operation of market forces. Its existence proves that market forces have been supplanted by institutional controls. This single rate may not clear the market, and, if it does, this may result from control over entry rather than the achievement of a competitive equilibrium position. Supply and demand do adjust and can be adjusted to the wage rate rather than wages adjusting to supply and demand. This is not to say that supply and demand have no effect on price, but only that their influence is often both indirect and muted. If the market is cleared, it is more likely to be the result of other factors, such as the policies of government and of private investors, than of wage adjustments.

Consumer sovereignty has now been supplanted by producer-consumer sovereignty. The policies of unions and employer groups as well as the choices of consumers affect the distribution of resources and the assignment of rewards.

5. *The Managed Market.* Economists, in the past, most commonly viewed the labor market as sufficiently perfect; but a number of them, more recently, have deemed it unsupportably imperfect. A major shift has taken place from defense to attack. Some form of managed market is offered as the solution for the shortcomings. One group favors a return to competition—to "compulsory individualism"; another group favors a step farther toward positive participation by the state. In either event state control should replace, in part or in whole, private control.

a) *Compulsory Individualism.* Henry Simons favored the abolition of trade unions since they seek to destroy free labor markets: "I simply cannot conceive of any tolerable or enduring order in which there exists

¹³ Hicks, *op. cit.*, p. 1.

widespread organization of workers along occupational, industrial, functional lines . . ."¹⁴ since "unionism . . . enables an aristocracy of labor to build fences around its occupations, restricting entry, raising arbitrarily the costs and prices of its products, and lowering the wages and incomes of those outside, and of the poor particularly."¹⁵ Along with limitations on trade unions, he favored antitrust prosecutions to increase competition in the product market. Hayek, apparently, favors the same approach.¹⁶

b) *Collective Determination.* Meade sees the same problem—"trade unions are monopolistic bodies with power and the incentive to rig the market"¹⁷—but basically a different solution. In addition to enforced competition in the product market, or, lacking that, socialization, he proposes consideration of two solutions: limitation of single bargains to employees of a single employer; and government fixation of individual wage rates so as to equalize supply and demand.¹⁸ Beveridge sees a somewhat different problem and supports a more specific program which includes government control of prices; limitation of wage increases through employer resistance, the action of arbitration tribunals, and the self-discipline of the trade unions; the planned location of factories; and "organized mobility" through the greater willingness of workers to change place and occupation, the dropping by the unions of restrictive rules, and the greater and perhaps compulsory use of the government employment service to guide movement.¹⁹

Lindblom, who seems unsettled as between compulsory individualism and collective determination, believes that "unionism and the private enterprise economy are incompatible."²⁰ Despite doubts as to feasibility, he considers certain measures necessary: (1) the breaking of the monopoly power of unions by prohibiting strikes over wage issues, (2) the reviewing of wage changes or the direct fixation of wages by public authority, and (3) the prohibition of all joint collusive activities of unions and employers.²¹

The managed market, particularly as suggested by Simons, Meade, and Lindblom, would, through government intervention, seek to tie wage setting and worker movement more closely together. Wages, so

¹⁴ Henry C. Simons, *Economic Policy for a Free Society* (University of Chicago Press, 1948), pp. 121-122.

¹⁵ *Ibid.*, p. 138.

¹⁶ Frederick A. Hayek, *The Road to Serfdom* (University of Chicago Press, 1944). (See particularly p. 36.)

¹⁷ James Edward Meade, *Planning and the Price Mechanism* (Allen and Unwin, 1948), p. 68.

¹⁸ *Ibid.*, p. 76.

¹⁹ William H. Beveridge, *Full Employment in a Free Society* (W. W. Norton, 1945), pp. 166-175 and 198-203.

²⁰ Charles E. Lindblom, *Unions and Capitalism* (Yale University Press, 1949), p. v.

²¹ *Ibid.*, pp. 243-245.

far as possible, would, through enforcement of competition or government fixation, be set at the competitive rate and labor resources would be properly utilized. Producer control would be limited and consumer supremacy restored.²²

Realistic Alternatives

Among these five models, the first, the perfect market, is truly a "labor market," since worker movement and wage movement interact precisely. The second (the neoclassical market) and the last (the managed market) are, by customary standards, sufficiently satisfactory wage setting and labor distributing mechanisms. In the former case this is due to natural forces and in the latter to government intervention. The two remaining models (the natural market and the institutional market) are usually counted the least satisfactory, since they operate so imprecisely in allocating resources to their most efficient uses and in setting wages—yet they are and have been by all odds the most common types.

Regardless of the alternatives with which one might choose to be faced, the perfect market and the neoclassical market are not currently obtainable in the United States. The natural market, while still the most ordinary occurrence, is on the wane. The growth of unions, of large enterprises, and of employers' associations is reducing its prevalence. The trend is against it. The managed market, though adumbrated by federal and state bans on the closed shop, cannot conceivably be fully introduced at the present time: (1) unions will not be destroyed or strikes over wages prohibited, as suggested by Simons and Lindblom; nor (2) will wages be fixed or reviewed by the government, plants be located by government decree, or hiring of any or all workers be forced through the employment service, as suggested by Meade and Beveridge. The economist's usual version of a satisfactory market, if it ever existed, is not going to be put together soon again in the United States, either by enforced atomistic competition or government wage fixing. The first is impossible of achievement and the second, while possible, would not, because of private pressures, lack of knowledge, lags in obtaining information and making adjustments, and difficulties of enforcement, be reasonably effective in obtaining the desired result. The institutional market will, instead, gain in importance. In the United States, the near future, at least, is on the side of stronger private governments. The consequences of institutional markets, consequently, warrant particular attention.

²² The "socialist market"—an advanced form of collective determination—if of the type suggested by Oskar Lange (*On the Economy Theory of Socialism* [University of Minnesota Press, 1938]) would also emphasize consumer's sovereignty.

Tests of Performance

No single test of the ability of wage and job markets to execute appropriate functions is sufficient. Wage and job markets serve more than one purpose and their effective working capacity needs to be evaluated against more than a single criterion. Nor should a perfect record on any test be expected. Human relations seldom lend themselves to the divine attribute of complete excellence. The degree of satisfaction of the minimum requirements of society is a more realistic if less consummate test than of the maximum desires of economists. The operational impacts of institutional wage and job markets will be matched against certain of these societal requisites.

1. *The Wage Structure.* Ideally the occupational and industrial wage structure should reflect alike the disutility flowing from the work and the utility of the service rendered. For closely similar work and workers, closely similar rates should be paid; and rates should be dissimilar in proportion to the dissimilarity of work and workers. There is no evidence that such a Utopian wage structure has ever fully existed. It is a useful norm for theoretical speculations but an unusable departure point for empirical studies. Such studies must compare, unsatisfactory as this comparison may be, developments where institutional controls (more specifically collective bargaining) are applied with developments in areas not responding directly to such controls, although these areas need not display "the competitive level" of wages.

One consequence of contemporary institutional controls in the labor market is evident. They conduce to the single rate within the craft or industrial field which they cover. The best, although not thoroughly convincing, evidence now indicates they have surprisingly little effect, however, on interindustry differentials, confirming the conclusions of Paul Douglas of a quarter of a century ago.²³ Whether this is because other forces such as productivity, comparative changes in employment, governmental policy, and product market configurations far outweigh unionism, or because collective bargaining while strengthening the power of the workers also leads to an offsetting augmentation of the strength of employers, or because union rates pull nonunion rates after them, or for some other reason, it seems to be a fact that collective bargaining has much less of an ensuing result on interindustry differentials than commonly supposed.²⁴

Sir Henry Clay has noted that in England before World War I,

²³ Paul H. Douglas, *Real Wages in the United States, 1890-1926* (Houghton Mifflin, 1930), p. 562.

²⁴ See particularly John T. Dunlop, "Productivity and the Wage Structure," in *Income Employment and Public Policy* (W. W. Norton, 1948), pp. 341-362; and two articles shortly to be published by Arthur M. Ross and William Goldner on "Influences on the Inter-Industry Wage Structure," and by Joseph W. Garbarino on "A Theory of Inter-Industry Wage Structure Variation." Dunlop explains interindustry variations in wages

"wages, it may fairly be said, constituted a system, since there were well-understood rates for most occupations; the relations between these were stable and generally accepted, and a change in any one rate would prompt demands for a change in other rates."²⁵ This "system" resulted, in part, from commonly accepted rules of equity and from institutional controls. Both militate against economic forces which tend to pull the "system" apart. As institutional controls spread and deepen, the "system" may become increasingly formalized with "historical relations" and "patterns" taking the place more and more of supply and demand. Widely pervasive political interrelationships instead of physical movement of workers will tie the wage structure together. It may eventually appear that the "system of wages" will have to be regarded by economists as an independent variable, rather than a dependent variable at the mercy of a myriad of economic causes.

By and large, the wage structure has not been distorted from its pre-existing mold as one would expect if unions were exploiting to the full their economic monopoly power. But then unions are not primarily economic monopolies but political organizations. The political test of meeting workers' notions of equity has more of an impact on wage policy than the economic test of income maximization.

If collective bargaining has had no revolutionary effect on the wage structure except to bring the single rate within the industry and within the craft, then, by means of wage influences, it seems likely its impact on the allocation of resources has often been exaggerated.²⁶ This does not mean that the wage structure under collective bargaining is ideally designed to allocate resources, but only that it has not been changed

primarily by four factors, not including unionism: "changes in productivity and output, the proportion of labor costs, the competitive conditions in the product market for the output of the industry, and the changing skill and occupational content of the work force of an industry" (p. 362). Ross and Goldner find that "among the industries which were substantially unorganized in 1933, subsequent increases in earnings were associated with changes in the degree of organization. However, those which were already substantially organized in 1933 have lagged behind all other groups." They add: "From an analytical standpoint, the difficulty is that these three influences (unionization, employment change and oligopolistic market structure) have been operative in substantially the same groups of industries. Statistical means are not at hand to disentangle their separate effect or to establish which, if any, is the primary cause." (This article is the sequel to an earlier one by Ross, "Influence of Unionism Upon Earnings," *Quarterly Journal of Economics*, February, 1948.) Garbarino concludes: "The foregoing discussion has attempted to illustrate the relationship between each of the variables in the wage model singly and changes in earnings. Such a relationship seems to exist for both productivity and concentration while for unionization the results are inconclusive."

²⁵ Henry Clay, *The Problem of Industrial Relations* (Macmillan, 1929), p. 74.

²⁶ Collective bargaining can have three principal impacts on wage rates: (1) on intra-industry and intracraft relationships, (2) on interindustry and intercraft differentials, and (3) on the general level of money wages as distinct from the structure (to which the next section of this paper refers); and in these three principal ways, through wage influences, can change the allocation of resources. Most attention is normally paid to the second (impact on interindustry differentials); but the first (impact on intraindustry and intracraft relationships) and the third (impact on the general level of wages) may be the more significant. Equalizing rates within the industry and craft and raising the general level of

so greatly from its "natural" state, bad as that may have been.

There is some real question how effective a wage structure can be in distributing labor in any event. Wages are only one of several important considerations which repel workers from some jobs and attract them to others.²⁷ The push of unemployment, for example, is often more effective than the pull of higher wages.

If institutional controls change the wage structure surprisingly little from its former conformations, it remains to be asked whether governmental wage fixing would bring it any closer to the competitive norm. No definitive answer is, of course, possible. It may be suggested, however, that much the same equitable considerations, albeit more uniformly applied, and equivalent pressures, though emanating even more from political incentives and less from the market, would leave their mark and we should be as far as ever from the flexible, equilibrating wage structure.

The institutional market does bring the single rate within the industry and craft, although by a different process. In adjusting inter-industry and intercraft rates it may represent an economy of means. The market can be tested and the wage structure adjusted more quickly and with less physical movement than would be the case in the natural market.

2. *The General Level of Wages.* The institutional market undoubtedly causes the general level of money wages to behave differently than it otherwise would, and a large literature has developed around this point. Here again, however, there may be a tendency to view with too much alarm. Wages always rise under conditions of full employment. The upward movement appears more spectacular under conditions of collective bargaining but possibly may not be as great as in its absence. At least the case for the opposite view is by no means clear. During World War II, nonunion wages on the average must have risen as fast or faster than union wages, although many other factors were at work aside from unionization. Wage levels in unorganized areas generally went up more than in such highly organized areas as Seattle and San Francisco, although here again other forces serve as explanations, too.

wages can substantially affect resource allocation, even if interindustry differentials are not much changed. Equalizing rates can affect, for example, which firms survive and the relative profitability of those which do; and raising the general level, for example, can affect the relative proportions of labor and capital utilized and relative amounts of final products and services demanded since the demand for some is affected more than for others when prices rise in response to higher costs. In general, however, it seems that resource allocation may be less affected and in somewhat different ways than is often stated.

²⁷ See, for example, Lloyd G. Reynolds and Joseph Shister, *Job Horizons* (Harper and Brothers, 1949), Ch. 2; and W. Rupert Maclaurin and Charles A. Myers, "Wages and the Movement of Factory Labor," *Quarterly Journal of Economics*, February, 1943. For a contrary view, based on apparently less valid evidence, see J. L. Nicholson, "Earnings, Hours, and Mobility of Labour," *Bulletin of the Oxford University Institute of Statistics*, May, 1946.

Experience in other democratic capitalistic nations also indicates that a high level of institutional controls has not been associated with abnormal wage advances but rather the opposite.

Unionism is not normally introduced into a society under conditions of *ceteris paribus*. Employers coalesce, also, and formally or informally have policies, too; and the government, through settlement of labor disputes, if in no other fashion, becomes involved. The new force of unionism is met by increased countervailing force. The problem of undue wage increases under full employment is more the result of full employment than of unionism.

Institutional controls while conceivably dampening the upward surge of wages during full employment certainly retard their downward tendency during depression; and thus the over-all effect may well be to raise the general level of wages. Given reasonable resort to other methods than wage control of achieving price stability, a continued growth of employers' associations, a further bureaucratization of trade unions, a continued rise in man-hour output, and a volume of employment not overly full, the impact of unionism on the over-all level of labor costs and purchasing power may be quite tolerable.

3. *The Distribution of Job Opportunities.* Under our system we depend on the choice of individuals to allocate human resources. But it is not alone resources which are being allocated but also job opportunities. The economic goal of efficient utilization of manpower is at least matched in importance by the political goal of equality of opportunity.

Institutional rules, in a sense, create markets—markets with specific occupational, industrial, and geographical boundaries and with rules affecting entry, movement within, and exit. Both unions and employers have policies affecting these dimensions and processes, but those of the former at their fullest development tend to be the more precise and restrictive. Selig Perlman's term, "job territory,"²⁸ well conveys the emphasis on citizenship and noncitizenship, immigration restrictions and quotas, and passports.

Instead of ill-defined markets existing most significantly as subjective impressions of workers and employment managers, markets become a finite entity. This is especially true of the hiring hall which is a market place, a bourse. Balkanization of job markets results, and these Balkanized markets operate differently internally and in their external relations than "natural markets." Internally, wages and conditions are more uniform, knowledge more complete, and movement is according to more formalized guides for conduct, such as seniority. Among markets, movement is both reduced in totality and redirected.

Union policies variously control, guide, and influence market proc-

²⁸ Selig Perlman, *A Theory of the Labor Movement* (Macmillan, 1928), p. 273.

esses. Control is illustrated by closed shop arrangements where access to the market is solely through union channels; guidance by the practices in the garment trades, for example, where the unions actively distribute work and workers but lack full control; and influence by the mass-production industries where union rights, such as seniority, and union membership by itself, identify the individual worker more closely with the company and the industry.²⁹ Both the recently completed New Haven labor market study³⁰ and the current Oakland study³¹ demonstrate that, for whatever reason, union members are less mobile. Formal policies of employers and employers' associations also effectively influence hiring and movement from job to job within the company.³²

These institutional policies affect less importantly the number of jobs available and the adequacy of supply to match them than they do the selection of those workers to whom individual opportunities are open. In addition to qualifications related to job performance, other attributes precedent to employment are frequently required. Perhaps the most socially questionable impact of institutional controls is on the availability of free access to jobs. This prompts the suggestion that the admission policies of unions and employers are of key importance in the operation of institutional markets.

4. *Freedom of Competition and Freedom of Association.* All forms of freedom are not fully compatible. Freedom of competition, a most laudable objective, and freedom of association often run counter to each other. Economic groups most frequently associate for the purpose of reducing or eliminating competition. Yet freedom of association is as basic a political right as freedom of competition is an economic blessing. Freedom of competition can only be assured in job markets by destruction of freedom of association, since freedom of association leads directly to institutional controls. The first can only be completely obtained by the complete elimination of the latter; and complete fulfillment of the latter can lead to the destruction of the former. Since it is not likely, nor proper, that either freedom should thoroughly supplant the other, a compromise of their claims is in order. Since associations are the aggressor, it is proper public policy to see that none becomes too strong as against any other, against the state, or against the individual, and that they be required to act responsibly. There will be some cost to freedom of competition, but then the policy of Simons is not without its different and greater costs. Both the causes of political freedom and

²⁹ A study of union policies and the labor market, drawing on evidence from the San Francisco Bay Area, will treat in detail with the influence of unions. This study is being made by the Institute of Industrial Relations, University of California (Berkeley).

³⁰ See Reynolds and Shister, *op. cit.*, p. 48.

³¹ Conducted by the Institute of Industrial Relations, University of California (Berkeley).

³² The Institute of Industrial Relations, University of California (Berkeley), has a study nearing completion on employer policies and labor markets.

economic efficiency must be served. The achievement of J. M. Clark's goal of "responsible individuals in responsible groups"²³ is, however, no simple task.

5. *Consumer and Producer Sovereignty.* Economists historically have favored consumer sovereignty, and there is no adequate substitute for it in a free society. Institutional controls cause this sovereignty to be shared with producer groups. While this most frequently reduces economic well-being, decisions of producer groups can display some wisdom as well; and producers can have some minimum demands for security and recompense which they can properly assert against the wishes of consumers.

6. *Preservation of Law and Order.* Some job markets make more of a contribution to industrial stability than others. Institutional controls are generally accepted or tolerated. With all their faults, they lend a certain order and discipline to industrial life. Destruction of unions and presumably of employers' associations, as suggested by Simons, or prohibitions of strikes over wages, as suggested by Lindblom, or government wage fixing, as suggested by Lindblom and Meade, would be lacking in that minimum voluntary approval which is indispensable to enforcement in a democracy.

Conclusion

Among the five models of the labor market which we have set forth, the trend is unmistakably toward the institutional market. It will always miss high excellence but it can be an adequate economic mechanism. It probably has rather less of an impact on the wage structure and the general level of wages than is frequently assumed, while reflecting freedom of association, allowing expression of a measure of producer concern, and contributing to over-all public tranquility. Such a market requires, however, particularly careful scrutiny of the efficiency and equality with which it distributes jobs. It is more likely to lack as a job distributing market than as a wage setting market, although it is the latter aspect which more often generates the greater concern.

Compulsory atomization and compulsory wage fixation should both be rejected and institutional markets accepted as the best alternative (although far from the best theoretical market form), and such modifications in them should be attempted as are deemed necessary to the protection of the legitimate welfare of individuals, groups, and the economy at large.

Most economists in the past have been too little critical of labor markets; some now are too much so. In an effort to achieve what is perfect, they would lose what is acceptable.

²³ John Maurice Clark, *Alternative to Serfdom* (Knopf, 1948), Ch. 5.

TRADE UNION POLICIES AND NONMARKET VALUES

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One of the most important social functions of trade unions, which has been sorely neglected by economists, is the ability of unions (however limited) to enable management to frame labor policies with an eye to nonmarket values as well as market variables. Why this should be termed an economic function will become clearer as we go along. For the moment it is enough to indicate that in the absence of trade-unionism the "entrepreneur's" activities—of which labor policy is only one—are designed, directly or indirectly, to cater to effective consumer choice as it manifests itself in the market place. That is insured, in varying degrees, either by intra- or interindustry competition or both. The entrance and entrenchment of unionism thus serves as a counterbalancing force to check the pull of the product market place.

At first blush this thesis gives the impression of asserting that trade-unionism stifles all competition in the product market. But such an implication is more apparent than real. We have talked about a check on competition and not about its elimination. And it is submitted that, under certain circumstances, union policies check those aspects of market competition which compel management to neglect the non-marketable facets of production. What, then, are these circumstances? Which nonmarket values are involved? And what is the impact on marketable values of the enforcement of these nonmarket considerations?

For convenience of exposition, we can analyze some of the union policies in question under two basic headings: industrial morale and lifetime productivity. Needless to add, these two categories are in some ways interrelated; that will become clearer at a later juncture.

I

The social importance of industrial morale can hardly be exaggerated. And yet it is often neglected in business practice precisely because its marketable value is low. Society in a private enterprise system would hardly need to concern itself with the problem of industrial morale were there a very high correlation between variations in business costs and changes in worker morale and if, furthermore, management were firmly convinced of this relationship. But precisely because management is far from convinced of any significant relationship between these variables, we can hardly sit comfortably by and expect management to allocate voluntarily a sufficiently large portion of its annual budget to

the improvement of morale. (This, as we shall see, is necessarily true in a "highly competitive" industry and probably true in industries characterized by a "considerable" degree of monopoly.)

Nor is management being irrational in its policy of cutting certain personnel services—like counseling, training of foremen, testing, etc.—before any other items in its expenditures with the onslaught of a recession or depression. The business assumption that in many lines of industrial activity morale has little or no impact on costs is far from being as ridiculous as many "human relations" experts would assert. For the oft-repeated "human relations" dictum that morale influences costs in an over-all fashion in the business unit hardly indicates (a) by how much changes in morale influence costs and (b) in what operations the influence is greatest. It is not too unreasonable to assume, a priori, that the relationship between morale and costs (say via the productivity impact) varies from operation to operation in the business unit. For example, the relationship is probably less significant in assembly-line work than in highly-skilled machinist tasks.

Granted, therefore, that society should not realistically expect management to concentrate enough resources on the development of high industrial morale and granted further that high industrial morale is a very important social value since it is a necessary condition for the orderly evolution of the socio-economic climate (not to mention other considerations), it follows that a logical case could be made even for government subsidies to management for the purpose of improving morale to the necessary limits. If this is so—and the conclusion is inescapable if one accepts the basic premises proposed here—it certainly follows that certain costs imposed by unions on management for the purpose of attaining better industrial morale are "desirable" from a social viewpoint. In fact, they are more desirable than a government subsidy, for a variety of reasons, one of which will suffice at this juncture: The union costs would be imposed on the relevant business units rather than on the citizen in general via a tax, which would probably have to be the case if the state subsidized private business expenditures.

The obvious criticism of the thesis presented here is that many (if not all) the union policies which improve industrial morale do not impose significant costs on the employer and that, therefore, the employer himself would in the long run establish them. Union policies, therefore, according to this line of reasoning, do not fulfill any important social function insofar as morale is concerned. There are several weaknesses in this view. First, many union policies which contribute toward an improvement of morale do impose costs on management. Secondly, it would take—in fact it has taken—the threat of unionism to induce many an employer to enforce even those policies which are not very costly.

Finally, in order for the union to hold the allegiance of its members and maintain its strength it must do more than succeed in enforcing so-called "morale" policies. It must succeed in obtaining concessions which, while not perhaps contributing very significantly to better morale, do impose extra costs on the employer. In the absence of such concessions the union would lose its strength and would not, therefore, be in a position to enforce morale policies.

This analysis of the social implications of industrial morale has implicitly assumed that union policies improve industrial morale. Such an assumption is probably not far from the truth, although it cannot be asserted as irrefutable until some such time as quasi-scientific experimentation becomes feasible in this area. But this much can be asserted even in our present state of quasi-ignorance: The common pronouncement of certain business executives that unionism necessarily destroys morale because it stirs up (so-called) class consciousness, is a little too cavalier a dictum to warrant any serious attention.

There are too many obvious indications of better morale resulting from unionism to accept seriously the charge that unionism necessarily deteriorates morale. The reference here is to the ability of unionism to prevent arbitrary treatment of the worker by management, to afford the worker with a sense of belonging, and similar practices which have been stressed again and again in the so-called "human relations" literature. But in addition to these obvious manifestations of union influence on morale, there are others which are not always recognized. I would like to develop one of these here, which I shall call—for want of a better term—the choice of alternative gains.

The basis for the theory of the free (unorganized) labor market is, of course, that each worker in the market will offer his labor services under those conditions which bring him the greatest net economic advantage in the long run. Aside from the fact that the worker does not behave in this fashion in reality,¹ there is something even more fundamental involved for our purposes here. In the unorganized labor market the individual worker chooses his net economic advantage on the basis of alternatives over which, for the most part, he has no control. In such a market the individual worker must take as given many of the variables of the job. This does not in any way imply that the bargaining power of the unorganized worker is zero. Quite the contrary. Even when the bargaining power of the individual worker is at its peak, as in a period of full employment with labor shortages, he still has no say over many of the alternative job elements between which he must choose. Because of his bargaining power he may well succeed, say, in obtaining a

¹ Cf. L. G. Reynolds and J. Shister, *Job Horizons* (Harper, 1949).

substantial wage increase, but he is not in a position to alter certain other data. Let us illustrate this point.

In the unorganized labor market the individual worker can successfully bargain with the employer over his wage scale, under certain circumstances. And a separate scale can be worked out with each worker, despite the inequities which are thus entailed. But suppose now that in the plant in question the prevailing hours of work schedule is not satisfactory to the worker. It is obviously not feasible for the employer to work out a separate work-hour schedule for each individual employee. An individual worker, whether he be a newly-hired hand or not, must therefore take the hours of work as given; as an individual, he cannot alter the schedule.

Certain obvious criticisms of this thesis must be met at this point. First, can the worker not turn to some other plant in the same industry where the hours are more in keeping with his needs? Secondly, can he not turn to some firm in an entirely different industry for this purpose? And finally, if the answer to the preceding queries is in the affirmative, does it not follow that the (actual or potential) mobility of the workers will entail a rearrangement of hours of work which is in keeping with the needs of the unorganized employees?

It must be recognized at once that to assume such a degree of mobility (actual or potential) implies a full employment economy. But is it accurate to assume such a high degree of labor mobility even in a full employment economy? Recent studies would seem to cast a doubtful light on such an assumption, to say the least.² For example, a worker who has acquired a useful skill may not be able to move to another industry simply because there may be no industry around which can use his skill; and as for shifting to another firm in the same industry, chances are that the work schedule is the same in all the firms or nearly enough similar to discourage movement. Further—and this is the most significant point—even assuming a high rate of potential mobility and assuming significant divergences in work-hour schedules (two very heroic assumptions), the worker may not shift simply because the net economic advantage of the job he is holding may be a maximum. And yet this maximum net economic advantage stems from a combination of hours and wages which is not necessarily in keeping with the worker's needs, merely because it is a combination which is established without his participation. To put it more simply: If the worker were given a say in the hours-wages combination he wanted, he would choose, say, somewhat shorter hours with a different wage scale. But that is something he cannot accomplish so long as he is an individual worker bargaining in

² Cf. Reynolds and Shister, *op. cit.*

an unorganized context.³ The mere mobility of labor does not insure the worker a say over certain job variables—such as hours of work—simply because the initiation of change in this area lies with management and not the worker. We would have to assume a bourse type of organization to attribute initiation to the worker. Now, one hardly needs to be a labor economist to testify that the labor market does not even remotely resemble a bourse.

The preceding illustration—and others that could be adduced—points up the fact that many of the elements of a job must be taken as given by unorganized workers. Thus the worker's choice of alternatives—even when his bargaining power is "high"—is a limited choice, since a number of the alternatives cannot be changed by him so long as he is unorganized. In an unorganized market these alternatives are determined mainly by such forces as technical change, the state of business activity, governmental influence, etc., rather than by workers' preferences.

Now if the unorganized worker has only a limited opportunity to control the alternative job elements between which he chooses, it follows that he is not in a position to choose exactly that combination of pecuniary and nonpecuniary returns which will best balance his interests and therefore best contribute to his high morale. That is clear enough from our preceding illustration of hours of work. It also emerges very clearly if we think of the problem of the complement of men on capital equipment (so-called "size of work crews").

Now if instead of an individual worker in an unorganized labor market we assume a strong union bargaining with the relevant management units, the job elements which are unalterable data for the individual become bargainable points for the union. This is not to imply, of course, that all data become variables; for instance, it is probably not feasible for any union—however strong—to eliminate night runs on the railroads, say. But there are many data which a union can transform into variables under circumstances which we shall analyze at a later juncture.

But what of the standardization policies of unions? It is well known that a union, because it is a body politic, must of necessity pursue standardized policies over the relevant bargaining unit, within limits. Does it not follow from this policy, therefore, that the union is in no position to establish practices which best suit the differing needs of the various members of the organization? One thing is clear: the union-established practice will please some members and displease others. But if the workers have voluntarily accepted the given policy, if they go on accepting year after year policies negotiated by the organization, it is not unreason-

³ Absenteeism is no solution for the worker because, aside from being fired for it, it still does not solve his problem of work hours while he is on the job.

able to assume that a significant majority of the members are pleased with them. To make such an assumption about unorganized workers, on the other hand, is not equally valid. For, as we have seen, the individual worker does not have the opportunity to establish many of the alternatives between which he chooses; he must accept many—if not most—of these alternatives as given. He may be quite dissatisfied with these alternatives, but he is in no position to do very much about it, for he lacks group organization. And it is precisely because he has had no say in their formulation that he sometimes becomes dissatisfied with them to such a significant extent that he turns to organization. And herein lies the paradox of the piece: Most workers can exercise their free choice over the alternative job elements as individuals only if they first become part of a union. And this in turn leads to the following corollary: Most workers can freely decide between their interests as producers and as consumers, within limits, only if they are members of a strongly organized group, such as a union.

To summarize: Management, notably in highly competitive industries, is in no position to devote enough resources to improving industrial morale to the necessary limits. And yet high industrial morale is a very important social value, primarily—though not exclusively—because it is a necessary condition for the orderly change of the socio-economic climate. To the extent, therefore, that union policies improve industrial morale they are performing the function of bringing into closer relationship business and social costs, other things equal.

II

Another influence of union policies on so-called "nonmarket values" becomes clear when the concept of the lifetime productivity of the worker is brought into play.* We start with the assumption that many a labor practice which will maximize the productivity of the worker over a relatively short period—say several years—will not necessarily maximize his productivity during his lifetime. Now the individual firm in a highly competitive industry where labor costs are a significant proportion of total costs must and will be concerned with the short-run rather than the lifetime productivity of the worker. That follows from these considerations: (1) The turnover in the labor force. Any individual management must rationally assume that it will lose a certain number

* By "lifetime productivity" we mean total production during the active working lifetime of the individual. That immediately raises two fundamental questions: (1) What is the optimum retirement age, not only from the viewpoint of maximizing national output but from all other viewpoints as well? (2) How is the problem of involuntary unemployment tied in with this definition?

As for the first question, we take the "optimum" as given, since this is presumably determined—in a free society—by the socio-economic climate. The second question is discussed in the text at a later juncture.

of workers each year, with the result that all short-run concessions made to such workers for the purpose of greater lifetime productivity become a net loss to the firm.⁵ (2) Any individual firm that pursues labor policies designed to maximize the lifetime productivity of the worker may find itself at a serious competitive disadvantage in the short run if the other firms do not do likewise. And if management acts rationally, it has to assume that the other firms will not. It hardly need be added that this disadvantage may become serious enough to drive the firm out of business. (3) The preceding conditions obtain whether we assume a full employment economy or otherwise, although perhaps with lesser force in the former case. But if we consider an economy which is chronically characterized by a "significant" volume of unemployment, it is obvious that workers whose productivity begins to fall off for any reason can be rather easily replaced by drawing on the unemployed.

The analysis up to this point has shown why, in the absence of unions, business firms will not gear their labor policies with an eye to the lifetime productivity of the worker, however much society may be concerned with this aspect of productivity rather than the short-run facet. Suppose now, therefore, that in a highly competitive industry a union becomes firmly entrenched, and assume further that the scope of the bargaining unit is coterminous with the competitive area of the product market. Under these circumstances, the various competitive firms are in a much better position to take account of lifetime productivity simply because the short-run disadvantages are imposed uniformly on all the relevant firms; although obviously there is always the danger of interindustry competition (a point to which we shall return later). Once this is recognized, industry-wide bargaining—or any type of bargaining unit which encompasses all the firms that compete against each other in the product market—assumes a complexion considerably different from that which emerges in the analysis of the late Professor Simons and others of his school. Instead of being solely a device to exploit the poor unprotected consumer—which it never has been, incidentally⁶—it becomes an instrument which enables the employer to accept labor policies that are geared to the lifetime rather than the short-run productivity of the worker. That can hardly be termed a social liability.

⁵ Looking at this problem "objectively" (from the viewpoint of the industry as a whole), one can well argue that since turnover applies to all firms the losses will cancel the gains in each case. There are two weaknesses in such a line of reasoning. (a) Such a probability distribution cannot be automatically assumed, without an examination of the underlying conditions. (b) Even if such a distribution does obtain, the action with respect to labor policies is taken by each firm acting on its own independently of the others and within such a context no firm will rationally consider the total reaction in the industry.

⁶ Cf. Lester and Robie, *Wages Under National and Regional Collective Bargaining* (Princeton University, Industrial Relations Section, 1946).

The preceding analysis indicates that where a union becomes entrenched and enforces a bargaining unit coterminous with the competitive area of the product market—industry-wide contracts being one type of such bargaining—an institutional framework is established which permits management to focus attention on the lifetime productivity of the worker. But then a further question arises: Will management want to introduce the relevant policies even if the framework enables them to do so? On their own, perhaps not.⁷ But the significant point for this analysis is that not only do the unions introduce the required framework but that they also introduce substantive policies within this framework, and some of these policies may have the result of maximizing the lifetime productivity of the worker. What, then, are some of these substantive policies? Before answering this question, two points need to be stressed. (1) I am not asserting that these policies necessarily maximize lifetime productivity. I am simply saying that they may accomplish this. (2) I am not asserting that the motives of unions in enforcing these policies is the concern with lifetime productivity. The motive may have been—and probably was—something completely different. But the motivation is not a relevant issue for the question in hand; the results are.

Let us now glance briefly at some well-established substantive union policies which, under certain circumstances, may contribute to greater lifetime productivity of labor. Seniority in layoffs and recall is a case in point. We start with the premise that there is a high positive correlation between age and length of service. We assume, furthermore, that "older" men have greater difficulty in adapting themselves to new jobs than do "younger" people, with the result that the productivity of the "older" men will fall off relatively more than that of the "younger" workers if they are compelled to take a new job, notably in a different industry. These assumptions do not imply universality in their applicability, but such universality is hardly necessary for the thesis in question, as we shall see. On the basis of these assumptions, it follows that while individual firms may suffer in efficiency in the short run by laying off and rehiring according to seniority, and while the economy as a whole may suffer in the short run, social output in the long run is nonetheless enhanced, unless one assumes a chronic and significant volume of unemployment.

But, it might be argued, does not seniority in layoffs and rehiring

⁷ Notably if we assume a chronic and significant reserve of unemployed on which management can draw whenever the productivity of workers on the pay roll falls below a given point, and assuming of course that the union contract permits management to do this. If one is willing to make this assumption about unemployment, the maximum productivity of each worker *while he is on the pay roll* is (more or less) assured by the process of replacement, even in the total absence of collective bargaining.

have any offsetting effects in terms of social output, even if the preceding thesis is accurate? There is, first, the obvious objection that seniority cuts down voluntary mobility, thus preventing a better allocation of labor resources and reducing the size of the social product. This qualification is probably not of too much significance simply because voluntary turnover seems to be concentrated primarily among younger workers, even in the absence of seniority.⁸ A second qualification, which seems more valid, is the undesirable impact on efficiency within the firm entailed by the bumping process which seniority not infrequently generates. But to argue that this factor reduces the net increase in long-run social productivity is a far cry from the cavalier assertion that seniority in layoffs and recall must necessarily cut down the absolute size of the product because of bumping and other considerations.

Another union policy which may, under certain circumstances, have very beneficial effects on lifetime productivity is what, for want of a better term, I have called "output control." This encompasses such practices as the complement of men on capital equipment, speed of work, etc. It is simple enough to assert that the immediate effect of these policies is to cut down productivity per man-hour. But that hardly exhausts the impact of these practices, for we are far from certain what the effects will be on lifetime productivity. For instance, reducing the speed of work may, up to a certain point, enhance the lifetime productivity of the worker.

The preceding comments do not in any way imply that all union practices of output control have this beneficial effect. If we call optimum output per man-hour that output which maximizes the productivity of the worker over his lifetime, it is undeniable that certain policies of certain unions are a good distance away from this optimum. Even without knowing precisely where this optimum lies in each case, it is obvious that any contract which requires that a truck driver crossing a state line have another one accompany him to avoid loneliness and boredom is not striving for optimum output. But not all cases are as simple to diagnose as this one. And precisely because a lagging social science has failed to provide us with enough information about the optimum productivity, we should beware of the facile assertion that all union policies designed to control output in the short run have a similar effect over the long pull.

Another criticism of union control of output is that in a full employment economy this may have inflationary effects. Two qualifications about this criticism will suffice here. (1) If, over the long pull, the union policy in question leads to a higher total output, the inflationary

⁸ Cf. S. H. Slichter, *The Turnover of Factory Labor* (New York, 1919); Reynolds and Shister, *op. cit.*

pressures over the long pull will be less rather than greater, other things equal, whatever the short run may hold in store. (2) It can be argued with considerable logic and factual support that any given union obtaining concessions in the form of output control from management will gain that much less in the form of other concessions—say, wages.⁹ If this be so, then output control does not lead to higher unit costs than would otherwise be the case, other things equal.

The influence of unionism in reducing the hours of work per week is far from definite, not only because the historical record is blurred, but even more significantly because what a relatively weak prewar labor movement could do is no indication of what a powerful present-day labor movement can accomplish. But it is hardly unreasonable to assume that unions press for shorter and shorter hours of work over the long pull. Now, left to its own resources and objectives, private business will gradually reduce the hours of work with an eye to the competitive market place, but this hardly offers the assurance that the reductions will be in line with the maximum lifetime productivity of labor. Needless to add, in their pressure for shorter hours unions may go beyond the optimum, but they certainly have the power to enforce the optimum which, without them, might not obtain, except by the sheer force of coincidence.

A final policy which merits our attention is the union pressure for health and welfare funds which allow for unemployment payments due to sickness and for adequate medical care. Lack of financial reserves forces more than one worker to continue on the job even when sick, and not infrequently this leads to a long-run deterioration of health and productivity. The absence of medical care leads to similar results. The establishment of union welfare funds may check both these tendencies. And the significant point for our purposes here is that such provisions for the sick would probably be lacking in the absence of union pressure, not so much because employers are ill-willed or stone-hearted, but rather because employers in a competitive industry acting independently are not in a position to do otherwise.

III

We have seen briefly how unions can influence management to take account of values which would otherwise probably be neglected, notably in highly competitive product market structures. But we have not indicated to what extent such influence can be exerted. Nor is it a satisfactory answer to aver that this extent varies from union to union and for the same union over a period of time. For we still have to account for these variations.

⁹ Cf. J. Shister, *Economics of the Labor Market* (New York, 1949), pp. 193 ff.

It has already been shown that a firm in a highly competitive industry cannot afford to pay adequate attention to nonmarket values even if it wanted to. The inexorable pressure of the product market prevents this. It follows that a necessary condition which must be fulfilled before any individual firm can devote adequate expenditures on nonmarket factors is the establishment of institutional arrangements whereby such expenditures have to be made (more or less) simultaneously by all the firms competing against each other in the product market. This in itself is, of course, not sufficient, for the firms must still be desirous of making such expenditures or be compelled to do so by some outside force. Hence, in any collective bargaining unit which encompasses all the firms that compete against each other in the product market, these necessary and sufficient conditions are fulfilled. We can call such a unit a market bargaining unit. Industry-wide bargaining thus becomes only one type of market unit, for there are many industries in which the product market is only local or regional.

We thus reach the conclusion that only under market bargaining is the highly competitive business unit in a position to take account of nonmarket values, government control aside. Which is another way of saying that only in such a unit can a "proper" balance be struck between the interests of the workers as producers and the consumers with effective purchasing power. Such a balance is assured, with varying degrees of success, by the union representation of the workers.

But the question immediately arises: Does not even a market bargaining unit confront the danger of interindustry competition? The answer is obviously in the affirmative, although the intensity of this competition is rarely comparable to that obtaining within the industry, unless the intraindustry structure is characterized by a substantial degree of monopoly. But whether intense or not, the interindustry competitive factor points up a very significant conclusion: In order for the business unit in an enterprise economy to take full account of nonmarket values—short of complete governmental control of this phase of business activity—we need collective bargaining on a "supermarket" basis; i.e., the uniform imposition of nonmarket costs on all firms in the economy. Obviously this is the logical conclusion of the thesis presented here, although as a practical matter we need not go this far in order to insure "adequate" attention to nonmarket values. Market bargaining would be enough in this context.

The cry can immediately be heard: But any such policy of market bargaining would automatically eliminate all competition in product markets and the consumer would be totally exploited. That, of course, is as much emotionalism on one side of the fence as "the union can do no wrong" emotionalism on the other side. The truth of the matter is

that product competition could continue, except that no firm could hold an advantage over another by virtue of a differential in labor costs attributable to factors other than managerial "efficiency" (in the broadest sense of this term). That is what "taking labor out of competition" really means. It does not mean the elimination of product competition; it does not mean the elimination of labor mobility; and so on. It means instead that institutional arrangements are structured which enable employers to consider nonmarket as well as market values in their dealings with labor. Put another way: It enables management to shift some of the emphasis from the individual as a consumer with effective purchasing power to the individual as a producer. That is the important social connotation of "taking labor out of competition."

There are obviously numerous "strictly economic" facets to market bargaining—such as its impact on collusion between unions and management, on the rate of technological change, on the level of prices, and so on. I shall not go into an analysis of these points since they have been adequately debated elsewhere.¹⁰ But one element of the problem neglected in this controversy is relevant at this juncture. Even if one assumes that the market bargaining—and industry-wide bargaining is simply one type of this genre—has certain undesirable market impacts, say leading to higher prices, the fact remains that this market liability has to be weighed against some gain elsewhere. And certainly part of this gain, if not all of it, takes the form of greater protection of the worker's interests as a producer, in contrast to his role as a consumer. When the problem is viewed in this light, the so-called "market" losses are only a gross loss, since on net balance these losses may be transformed into social gains when one stops to consider nonmarket values as well. It must be noted that these nonmarket values are of no small moment, for, as Clark has so admirably phrased it:

In looking back over the catalogue of things we want and need, one thing that stands out is that the most crucial of them are not commodities one buys in a market, or that markets can be expected automatically to supply. Yet they are things the market affects, for better or for worse, and the ways in which it affects them are among the most important things about it. Left to itself, the market will neglect many of them disastrously. [*Alternative to Serfdom*, page 21.]

To argue against industry-wide and superindustry-wide bargaining units because this concentrates too much power in the hands of the unions with inevitable abuses, is not only to diagnose the situation inaccurately—witness the Scandinavian experience¹¹—but, even more

¹⁰ Lester and Robie, *op. cit.*, *Proceedings of the Conference on Industry-Wide Collective Bargaining* (University of Pennsylvania Press, 1948); C. E. Lindblom, *Unions and Capitalism* (Yale University Press, 1949); L. Wolman, *Industry-Wide Bargaining* (New York: Foundation for Economic Education, 1948).

¹¹ Cf. Norgren, *The Swedish Collective Bargaining System*; W. Galenson, *Labor in Norway*. While the Scandinavian experience is not conclusive confirmation of the thesis in question, it is not something to be ignored in the analysis.

fundamentally, to take a biased approach in scientific investigation. For any analysis of the impact of unionism solely in terms of market values is a biased analysis. Why should market values alone be the governing factor in deciding on the social adequacy of any policy? I submit that many of us who do this hardly recognize any bias in our approach simply because "traditional economics" has always taken for granted this criterion as the guiding light in policy. Nor is it sound to argue, as some economists do, that one can analyze the marketable and non-marketable values separately and then draw up a combined social balance sheet, for such a viewpoint ignores the fact that these two sets of values are not of an additive nature.

Even if many reputable economists should ignore the nonmarket values, the union leaders will not. In a free society such as ours the constant pressure for greater emphasis on nonmarket values is not something that can be easily stifled, barring of course world catastrophe. If unions are unsuccessful in obtaining such nonmarket concessions via the collective bargaining route, the only alternative left will be government action. Thus any attempt to restrict the scope of the collective bargaining unit by legislation (which the Taft-Hartley Act does to some extent but far less than would have been the case if the opponents of industry-wide bargaining had had their way) will only necessitate further government intervention to enable the workers to attain those goals which such restrictions prevent them from reaching. This will mean more rather than less government control. It is submitted that if a given end can be equally well attained either by government or private action, it is preferable to rely on the private course. Hence it follows that it is preferable to allow the unions to enforce policies designed to cater to the worker as a producer—so-called "nonmarket" values—than to rely on the government to do it. And obviously the case against government intervention becomes all the stronger if one is prepared to argue that much of what unions can accomplish in the way of non-market values a large bureaucratic government organization cannot.

Assuming the continuation of a free society, therefore, we cannot escape the conclusion that the emphasis on the worker as a producer will continue to grow. Hence we have two basic alternatives before us: Let the trade-unions acquire the power necessary to enable them better to emphasize nonmarket values, or turn to the government for such enforcement. It is obviously no solution to argue, as some economists have argued, that the unions should be encouraged to pursue those policies which protect the individual's nonmarket interests and at the same time to cut the unions down to size so as to prevent them from becoming giant monopolistic monsters that exploit the consumer and destabilize the economy. This "grass-roots unionism" thesis implies

that the nonmarket interests of the workers can be adequately protected, or even better protected, when we have small independent plant-wide unions doing the bargaining for the workers. This makes the union "close to the worker," as the argument goes, and really enables the leadership to coincide with the interests of the workers. But such a thesis of "having your cake and eating it too" misses the most fundamental point of the whole problem: that the nonmarket interests of workers can be adequately protected only if the scope of the collective bargaining unit is more or less coterminous with the scope of the relevant product market. Unions cannot be successful in protecting the interests of the worker without having the power to protect the interests of the entrepreneur as well, within limits. The more logical social course, therefore, is to encourage broad bargaining units and then, through appropriate public policy (if necessary), to prevent these large units from trampling on the so-called "public interest."

COLLECTIVE BARGAINING AND FISCAL POLICY

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The study of industrial relations has now spread so far beyond the limits of economics that the economist in these days has considerable difficulty in persuading students of labor that his discipline has anything to contribute to their studies. It is not enough for him to confess—as in all honesty he should—that economics comprises no more than about 20 per cent of the subject, and that the rest is sociology, social psychology, individual psychology, psychiatry, anthropology, law, engineering, political science, etc., with perhaps an occasional dash of philosophy, ethics, and even physics to improve the flavor. There is a strong (and to my mind a deplorable) tendency among the bright young labor specialists not merely to let economics go by default out of ignorance, as was customary among the older generation of writers on this subject, but to cast it out of the window bodily, with shrill cries of jubilation. One can hardly pick up a new book on labor nowadays without finding the author jumping gleefully on what he thinks is the corpse of Demand-and-Supply, or proclaiming with trumpets, "The Labor Market is Dead, Long Live Human Relations." In the interests of continuing certain valued friendships, I refrain from mentioning names, even at the cost of some bibliographical respectability, but the phenomenon is too obvious and widespread to have to be annotated.

This animosity displayed toward economics may perhaps be explained by the Oedipus complex (economics being in some sense the father of the new discipline of industrial relations), and while it may on that account be forgiven it is nonetheless to be deplored, if only because any animus is an obstacle to learning. I have wrestled in committee for a whole year with a psychiatrist who thought that industrial relations not only began but ended with the love life of foremen, and I have had similar difficulties with psychologists who think that industrial relations is no more than the science of "how to push people around and make them like it." I hasten to add, lest I be accused of the very animus that I deplore (and I confess to as much animus as a worm turned) that by far the most important contributions to industrial relations in the past few years have come from outside economics. Even the most hardened economist must now realize that purely economic models of trade unions in terms of maximizing behavior are not very realistic, and that the interpretation of union behavior in terms of power structures, considerations of prestige, relative advantages, and so on is extremely illuminating. Similarly, the Mayo studies and others like them have

revealed the immense importance of the factor of status and human significance in the industrial relationship and have rightly centered interest on the "human relations" aspect of the wage bargain.

Up to a point, therefore, the shift of interest in the labor field away from economics is entirely justified. The focus of interest of economics as a separate discipline is not men but commodities. The focus of interest of students of labor is, quite properly, men. It does not follow, however, that because economics is not the whole story or is even a small part of the story in the study of labor that it has nothing to say. I will concede 80 per cent to the other disciplines; but they try to take over the remaining 20 per cent at their great peril. Economics enters this field because labor is bought and sold and has a price (its wage); it is, that is to say, in spite of the Clayton Act, the ILO and the Federal Council of Churches, a commodity. It is, of course, a human commodity, and therefore around the circumstances of its purchase and sale there gathers a large and significant penumbra of human relations. It must not be thought that labor is unique among commodities in this regard: all exchanges, even in the stock market or the wheat market, have a certain social-psychological environment; this, in a sense, is what we mean when we say that all competition is in some degree imperfect. Nevertheless it is certainly true that the social-psychological penumbra is much more important in the case of labor than in the case of any other commodity, and it is this fact that makes labor a peculiar commodity, deserving of highly special treatment. But to say that it is peculiar does not mean to deny that it is a commodity, or to deny that the wage bargain is, among other things, an act of exchange.

I would argue, furthermore, that the commodity or exchange aspect of the industrial relationship is much more central to the understanding of the problem than most labor specialists are prepared to admit. The general character or "tone" of industrial relations in any period is determined to a large extent by what is happening in the world of commodities—whether, for instance, there is an inflation or a deflation in the general price-wage level, whether the level of employment and of income is rising or falling, is "high" or "low," and so on. Sociology and psychology may have a good deal to say about the effects of unemployment, for instance, on groups or on personalities; they have practically nothing to say as to its causes; that is the field of economics, and a field in which it can claim a great deal of success. I would hesitate to argue that happiness is a function of the national income, but I am pretty sure that misery is! And the national income in real terms is simply the total output of commodities; in money terms, the value of these commodities. Given a severe deflation or even a severe inflation, no amount of industrial psychology or sociology will save us from

severe dislocations in the industrial relationship; nor can the best industrial psychology or sociology save us from inflations or deflations, if the world of commodities is producing them.

I am not arguing, of course, that the world of commodities operates independently of the world of men. The economist, in his better moments, is aware that it is not commodities that behave, but men; that commodities move not of themselves, like the planets, but are moved by men; and that every exchange involves two people or groups of people as well as two commodities. He rightly bears this information at the back of his mind, however, rather than at the front, because his very skill as an economist depends on his ability to abstract from the complexity of human behavior those aspects which concern commodities and to summarize these aspects in fairly simple functional relationships among commodity variables. Thus he is somewhat in the position of the astronomer who can neglect the problem of whether angels move the planets, because whether they do or not their behavior toward the planets is perfectly regular, and therefore predictable, and hence any other quirks of motive or character which they possess can be neglected. I say "somewhat" because the men who move commodities are much less regular in their behavior toward them than are the angels, if any, toward the planets, and hence the economist cannot regard the universe of commodities quite without regard to the men who move them and are moved by them. Nevertheless, the behavior of men toward commodities is regular enough and simple enough to justify as a first approximation the concept of a universe of commodities following its own laws. This is what the economist means when he speaks of "impersonal market forces"—and it must not be thought that this impersonality applies to the extreme case of perfect competition.

An example will perhaps clarify my meaning. During the past few years the level of money wages as well as of prices in the United States has approximately doubled. The fundamental reason for this is not the development of superior skills on the part of trade unions or of management, nor changes in "bargaining power," nor power or prestige struggles, nor backyard-wall comparisons, nor price or wage leadership, nor any of the thousand and one noneconomic complexities which motivate the actual behavior of individuals. The rise can, without much exaggeration, be put down to a single cause: the growth in private liquid assets as a result of the public methods of war finance. Compared with this great single cause all the noneconomic factors shrink into insignificance. When the tide rises, the exact movement of waters and even the exact levels in the innumerable creeks and estuaries depends on their particular local configurations; but the water in them rises because the tide rises, not because there is a channel here or a sandbank

there. This is what the economist means when he affirms that there is such a thing as a labor market. A rise in the quantity of money or in its velocity of circulation creates an economic tide which will eventually filter into every creek and cranny in the economic system; it will create "shortages" at existing prices and wages which create a pressure for higher prices, whether that pressure is exercised through price and wage leadership, through the increased bargaining power of sellers, or the increased competition of buyers, and whether it is exercised in competitive or in noncompetitive markets. As a result of local power configurations (the channel here and the sandbank there) the tide may run a little higher in some places than in others, but the empirical evidence suggests that the differences so created are secondary in magnitude, especially when the tide is running in. At ebb tide it seems to be true that the dams of monopoly power can hold back a certain amount of the retreating income, but even these advantages seem to be only temporary.

I have used the metaphor of the tide advisedly, because it is precisely the "tide in the affairs of men" known as the business cycle which is the main problem of fiscal policy. The word cycle, with its implications of pendulum-like regularity, is perhaps a misnomer, but whether we are dealing with true cycles or not there is no doubt about the phenomenon of fluctuations in many important economic variables—especially output and employment and, to a less significant extent, in prices and values. The fluctuation which concerns us most, of course, is the fluctuation in output and employment, if only because any operation of the system below its proper "capacity" (i.e., ideal output) is almost pure loss. Price fluctuations are less serious—indeed, in moderation there is even something to be said for them as making for social mobility and for the dislodgment of vested interests—but beyond a certain point even price fluctuations are a serious inconvenience and create a good deal of haphazard injustice.

The principal task of government in this connection is to act as a "governor"; that is, to introduce a mechanism into the system analogous to a thermostat in a heating system or a governor on an engine. There are many reasons in theory, as well as in experience, for supposing that an unregulated free market system would be subject to marked fluctuations in payments, prices, incomes, and outputs. Dr. Wiener has coined the word "cybernetics" (from the Greek for "steersman") to denote the study of these stabilizing mechanisms,¹ of which there are innumerable examples in physiology (the homeostasis of the body), engineering, and ecology. The alternate chills and fever to which an ungoverned market economy seems to be subject is a familiar

¹ Norbert Wiener, *Cybernetics* (New York: John Wiley & Sons, 1948).

symptom of an inadequate cybernetic mechanism. The provision of such a mechanism is clearly a task of government; no other agency of society has the power, even if it had the will, to throw sufficient forces into the system to check movements away from the optimum position. It has been the inability of governments to govern, in this sense of the word, which has led to many quite improper extensions of government activity in the protection of special interests injured by general fluctuations; e.g., in agriculture and commercial policy. The principal instrument of governmental cybernetics is the fiscal system—by which we mean the whole system of governmental purchases, sales, receipts, and expenditures. Hence most economists regard "fiscal policy" as the principal weapon in the control of economic fluctuations. This point of view is a relatively new one in economics, but its acceptance is so wide that it can safely be described as orthodox. There are two ways in which government can have an impact on the magnitude of the economic system: it can have an indirect influence through affecting the behavior of private individuals, and it can also have a direct influence through its own transactions and transfers. Indirect influences consist mainly of prohibitions which limit the legal behavior of individuals (e.g., the minimum wage law); though they may also include propaganda devices for encouraging certain desired forms of behavior. The cybernetic aspects of these indirect influences are not altogether to be neglected, and occasionally (e.g., in the case of price-wage control) may be of very great importance. Nevertheless, for the most part they are not suitable for use as cybernetic mechanisms; they pertain rather to the long-range regulation of society rather than to its year-by-year stabilization. For the main instruments of a stabilization policy, therefore, we must turn to the direct influences (i.e., the transactions and transfers) of government. Of these the tax system is probably the most powerful in principle, especially if "negative taxes" (subsidies) are included, even though there are serious political obstacles to flexibility in taxes. Government purchases also are a powerful potential instrument of stabilization, though there are important physical as well as political obstacles to rapid changes in the volume of public works. Of less importance, but again not to be neglected, is the government financial system, including that of the central bank; by the management of the public debt and of central bank portfolios the composition of private assets can materially be affected. This is what is usually understood by "monetary" as opposed to "fiscal" policy, though the name is somewhat inappropriate, as the stock of liquid assets in private hands is determined much more by the fiscal system than by the financial or banking system.

If now we were concerned merely with the stabilization of a single

variable, the cybernetic problem would be relatively simple: it would consist merely in finding means of increasing the unruly variable whenever it was decreasing and of decreasing it when it was increasing. Thus in the control of temperature by a thermostat a mechanism is set up which turns on the heat when the temperature falls below the desired level and turns it off when the temperature rises above the desired level. An analogous mechanism in economic life would be the stabilization of the total volume of payments by means of an adjustable tax plan, such as I have proposed in my *Economics of Peace*.² Any reduction in the total tax bill will have a direct effect in increasing the total volume of private payments. It is also practically certain to have a strong indirect effect in the same direction because by increasing the government cash deficit it increases the amount of money in private accounts. Similarly an increase in the total tax bill will almost certainly diminish the total volume of payments. Government expenditure is here assumed constant, so that an increase in the tax bill automatically diminishes the deficit (or increases the surplus). This being so, if tax rates were linked automatically with a statistically determined total volume of payments, so that any rise in payments above the "standard" level brought a fall in taxes and any fall in payments below the standard level brought a rise in taxes, the fluctuations of the actual value of payments about the "standard" level could be reduced to any desired amount, depending on the sensitivity of the automatic reaction.

The total volume of payments is not, however, what we really want to stabilize. The critical instability in an unregulated economy is the instability in output—particularly as reflected in the periodic decline of output below its "ideal" level. Payments can fluctuate independently of output for two reasons: because of fluctuations in prices and because of fluctuations in the turnover of commodities. Fluctuations in the rate of turnover of commodities—i.e., in the ratio of total purchases (or sales) to total output—does not present a serious cybernetic problem except perhaps in local cases of extreme speculative hysteria, such as the Florida land boom and occasional bull (or even bear) markets in stocks or commodities. Fluctuations in price, however, present a very serious cybernetic problem. Thus suppose that by means of cybernetic controls in the tax system we succeeded in stabilizing not merely total payments but the national income, in money terms. This could probably be done, as the national money income is reasonably sensitive to changes in the budget deficit or surplus. It would still be possible to have wide fluctuations in "real income" (i.e., output) and therefore to have wide fluctuations in employment, with corresponding fluctuations in price levels in the opposite direction. Thus if Y is the national money in-

² K. E. Boulding, *The Economics of Peace* (New York: Prentice-Hall, 1945).

come, R is the national real income and P is the price level of that real income (R and P being measured by indices which are consistent), we have

$$Y = RP$$

Clearly within a stable Y it is possible to have indefinite fluctuations of R and P in opposite directions. Conversely it is possible to have a fluctuating Y with a stable R , provided that P fluctuates proportionately with Y . It follows that if the problem of stabilizing Y cannot be solved, then we have a certain choice between fluctuating prices and fluctuating outputs. Clearly of these the former is much to be preferred, remembering always that it is R (real income, or output) which is the principal object of any stabilization policy.

In dynamic terms, any attempt to increase R by increasing Y will be frustrated if the increase in Y runs off into price-wage increases. As long as output is very much below capacity there is every reason to suppose that there will be little pressure for price or wage increases, and that therefore an increase in Y —brought about, say, by fiscal policy—will almost certainly increase output and employment. As output rises towards capacity, that is, as the level of employment rises towards full employment, conditions for a rise in the price-wage level become more favorable. At low levels of output all supplies are likely to be highly elastic, for increased output can come simply from the employment of unused resources. Under these circumstances a rise in money demand-curves produced by a rise in payments or in private money stocks will not raise prices but will simply raise outputs. As we approach capacity, however, supplies in one field after another become less elastic; instead of merely absorbing unemployed resources in some fields, the limit of easily available specialized resources may be reached, and further expansion of output must then overcome the resistance of actual transfer of resources from one gainful occupation to another. When this point is reached in any industry a further increase in demand is bound to be reflected in price increases: we have reached the "inflation threshold." The nightmare of the fiscal policy enthusiasts is a situation in which the inflation threshold is reached over large sections of the economy long before the rise in output has brought the system to "capacity." If this is generally the case, then full employment cannot be attained without perpetual, and perhaps even accelerating, price inflation. The only available remedy would seem to be price-wage control. This is the wartime recipe for full employment, and experience shows that it works: highly inflationary public finance coupled with tight price-wage control to prevent the inflation going off into prices. Whether this recipe can be applied in peacetime, as a normal part of the

system, is highly doubtful in the present state of administrative techniques. Up to now we have not been able to develop an administrative technique of price-wage control on anything more than a strictly temporary basis: the recipe here is to freeze an existing situation and then to set up elaborate mechanisms of procrastination such as the OPA and the War Labor Board. Procrastination, however, while admirable as a short-run policy, will simply not do for the long run. Eventually the pressures become too great, the absurdities of the politically determined price structure become too patent, enforcement becomes too difficult, and the controls break down under the weight of their own absurdity. Unless we can improve the administrative regulation of the relative structure of prices, therefore, to the point where it can do even half way as good a job as the free market, price-wage control in a democratic society would seem to be out of the question as a permanent part of the economic apparatus. This being the case the question of the "inflation threshold"—at what level of output does it appear and what determines this level—is of prime importance for the success of any full employment policy.

It is at this point in the argument that the "state of the market"—competitive, monopolistic, oligopolistic—and therefore the development of collective bargaining becomes relevant to the problem of fiscal policy. Are we more likely to reach the inflation threshold at undesirably low levels of employment with perfectly competitive markets, with monopolistic markets, or with any of the varieties of monopolistic competition? Here, perhaps, is a point where the indirect aspects of governmental policy—its encouragement or discouragement of competitive markets, for instance—may be of great importance. Unfortunately, however, the question of the exact impact of market forms on the inflation threshold is by no means easy to answer. We certainly cannot assume, for instance, that if all markets were highly competitive there would be no problem of the inflation threshold. Highly competitive markets are notoriously subject to speculative price movements which may be set off by very slight occasions, and which up to a point have the power of self-perpetuation. It is not the elasticity of supply of the output of the commodity which is significant here but the existing stocks of assets (including money) and the asset preferences.³ Hence a budget deficit, leading to increased holdings of liquid assets in private hands, might easily set off speculative price movements in the organized commodity and security markets long before full employment was reached. There is some evidence that this took place, for instance, in 1936-37. Such speculative price movements are less likely to be felt in labor

³ K. E. Boulding, "A Liquidity Preference Theory of Market Prices," *Economica*, May, 1944, p. 55.

markets, of course, because of the non-storable nature of the commodity involved, but there is a great deal of evidence to show that unorganized labor markets respond rapidly to increases in the money holdings of the public, especially of employers.

Monopolistic markets, on the other hand, react much more slowly to inflationary or deflationary forces. The reasons for this may be more sociological than economic: monopolistically determined prices tend to be determined more "visibly" than prices in competitive markets. The "social visibility" of price determination in monopolistic markets is seen very clearly in the labor market. Wages of unorganized labor—e.g., agricultural workers or domestic servants—rise imperceptibly, but surely, in an inflationary situation. Each bargain is like the wavelets of the tide, so small that it raises no fuss, gets into no papers, calls for no editorials; but if there is an acute labor shortage at existing wages, each bargain represents a slight advance, imposed on the employer by the necessity of dragging labor away from his neighbor. When the tide rises against the sluice-gates of a union contract, however, there is pressure, discussion, violent spraying, and a final dramatic surge as the gates yield. All this is news, and is vividly before the public eye. When there are only four "rounds," the "fourth round of wage increases" becomes a topic of national importance. When there are a million "rounds," nobody notices any one of them and is not even particularly conscious of the whole movement. Similarly a rise in the price of steel or of automobiles makes the papers. Much greater changes in the price of wheat can pass almost unnoticed.

All this means, however, that monopolistic organization of the market is no hindrance but a positive help to a full employment policy in the short run. Unions, paradoxically enough, in an inflationary period become devices to prevent money wages rising as fast as otherwise they might have done—a paradox to which the war experience is a clear testimony. It is also true, of course, that in deflation, monopolistic prices fall more slowly than competitive prices. All that we are saying, in fact, is that monopolistic organization makes for greater stability of prices than a competitive organization. When the monopolistic organization takes the form of collective bargaining, this proposition is reinforced. It may well be that the most significant thing about collective bargaining is not that it is collective but that it is bargaining. Bargaining, as a method of price determination, has been largely superseded in commodity markets—especially in retail markets—by the custom of the quoted price, by organized brokerage, or by the auction sale. There are good reasons for this. Bargaining, for most people, is a disagreeable, time-consuming affair, of necessity involving an unsatisfactory, even unethical, type of personal relationship between the bargainers. Hence

once a bargain has been struck there is a certain unwillingness to reopen the negotiations. This is a fact of great importance in collective bargaining, whether of unions with employers or of milk producers with distributors. A peculiarity of the collective bargain is that it sets the terms upon which the individuals represented may trade, and sets these terms usually for an appreciable period in the future—months, a year, or even two years. Once the terms have been set there are strong institutional and psychological obstacles to changing them before the prescribed period. Having gone through the disagreeable experience of bargaining, we have no great urge to repeat it.

There are no such obstacles to changes in quoted prices, because the quoting of the price or accepting the quoted price in a transaction is not an act disagreeable in itself, nor surrounded with any publicity or effective penumbra. If a retailer finds that a certain standardized product is not selling, there is very little to prevent him cutting the price. Only in cases where there is strong differentiation of the product and hence the price comes to have an emotional significance created by advertising, etc., do we find any of these obstacles to changes in the case of quoted prices. Bargaining, therefore, and especially collective bargaining because it results in a contract extending into the future, acts as a strong price stabilizer. The growth of unions has led to a great increase in palaver, and palaver is a great friend of procrastination. We can see the significance of this for price-wage flexibility if we imagine that we had to spend a week of impressive argument bargaining with the milkman about the price at which he was to deliver milk during the ensuing year. Such an arrangement would introduce a marked inflexibility into the price of milk, even under strong inflationary or deflationary conditions! Even the fact that union officials are specialized in bargaining is not sufficient to offset the ponderousness of the bargaining procedure.

In the short run, therefore, we must unquestionably reckon collective bargaining as a friend of fiscal policy. The economist, however, usually has a bad conscience about the long run. Even though we—the present company—will be dead in the long run, the society of which we are a part will continue, and in spite of the fact that heredity has done precious little for us we cannot wholly divest ourselves of the desire to see our society perpetuate itself. And it may well be that policies and institutions which make things easier in the short run turn out to have cumulative effects which make things harder in the long run. The long-run worry about collective bargaining is, of course, whether it involves us in long-run inflation; i.e., in a persistent upward trend of the price level. The inflexibility in the price system which collective bargaining engenders may have excellent results on the upswing, when money

income is rising. It does mean, however, that we simply cannot afford ever to let money income decline, for a decline in money income can only come about through decreased output and employment, not through decreased prices and money wages. With a highly flexible price-wage system, fluctuations in payments or money incomes are not so important, simply because they result in changes in price levels rather than in output levels. With an inflexible price-wage system downward movements in payments or money incomes cannot be permitted, and hence upward movements cannot be corrected. This clearly leads to an inflationary bias in the system. How serious this is, of course, depends on its magnitude. It is conceivable that money wages might rise just about as fast as the rise in productivity; so that the price level of commodities would be approximately stable. As far as the trend is concerned, this was the case in the United States between, say, 1800 and 1940. This long-run stability in the trend, however, has only been achieved at the cost of several severe deflations and depressions. In periods of full employment the price level has always risen. Even if the secular trend of the price level amounted to only 5 per cent per annum a substantial revolution would have taken place in the economic structure. This would amount to a thirty-fold rise in the price level during the lifetime of a single individual. It would make most of our present pension and insurance schemes practically worthless, would create an acute social security problem, and would necessitate a sharp rise in money rates of interest. We might, of course, adjust ourselves to such a condition, but the problems of such an adjustment have been given very little thought.

Whether the development of collective bargaining necessitates secular inflation or not, there can be no doubt that an inflationary situation makes collective bargaining easier. The collective organization of the labor market invests the determination of wages with an atmosphere of sport, and substitutes for the cold calculation of the market place the hot enthusiasms of the football field. The parties that face each other across the bargaining table are not negotiating a commercial agreement so much as fighting a battle. Each side goes in to "win"; each side has its invisible "rooters"—the vociferous ranks of union members on the one side, the more decorous but still powerful ranks of the capitalists on the other. It is, however, much more important for the union leaders to "win" than it is for the management, if only because union leaders are much more liable to lose their jobs if they lose. There is a world of difference between the regretful shrug of a capitalist and the raucous displeasure of a worker. Thus the union leader is under tremendous pressure to "bring home the bacon," even if what he brings home is something which the workers would have got even without his assistance. It may well be that the "football psychology" engendered by the

stress on competitive athletics in our educational system may be a serious handicap to a society geared to negotiation rather than to warfare. The battle of capitalism is more subtle than the battle of Waterloo and may well be lost on the playing fields. Whatever the causes of this phenomenon, there can be no doubt about its consequences. Even a mild deflation will produce sharp internal strains in labor organizations and is almost certain to result in a marked intensification of industrial strife. A fall in money wages is something for which the union gets blamed, as a rise is something for which it gets praised. A fall in real wages due to price increases cannot be laid directly at the union's door; neither can a rise in real wages due to price declines. Hence in an inflation the union gets credit for the rise in wages but does not take the blame for the rise in prices; in a deflation it gets the blame for the fall in wages but gets no credit for the fall in prices. The interest of unions in at least a gentle inflation is all too clear.

It is important to inquire, therefore, whether anything can be done to mitigate the danger of secular inflation under a "liberal" regime, without going over to the other extreme of Republican stinginess. Several lines of policy are worth consideration. There is first the possibility of recurrent but temporary price and wage control to effect a rapid scaling down of the whole price-wage level. We have already rejected any permanent price-wage control as administratively impossible in the present state of knowledge. It might be possible, however, to replace the long, slow, painful deflations of the pre-Roosevelt era by short, sharp, and consequently relatively painless deflations. If when deflation and unemployment threaten the economy the regulative powers of the state are used to effect a sudden—indeed, an overnight—reduction in all quoted or contractual wages and prices, the effect from the point of view of the consumption function would be virtually the same as an increase in the quantity of money in private accounts. By this means we might be able to avoid the great dilemma of deflation—that while low money wages and prices, with a given money stock, are conducive to a high consumption function and hence high employment, falling money wages and prices are extremely destructive of profits and of investment, and lead to low levels of employment. Consequently, it is the long, slow deflations, such as took place in the seventies or the thirties, that are associated with severe depressions and slow recoveries, while the short sharp deflations, as of 1857 or 1919, produce only mild depressions and rapid recoveries. Almost the only alternative to the "instantaneous" deflation proposed above, if a full employment policy is rigorously followed, is continual budget deficits and increase in privately held money stocks whenever employment slackens. Such would inevitably give us a secular inflation.

The possibility of controlling price levels in the stable commodity markets through the composite commodity standard proposed by Benjamin Graham¹ should also be considered seriously in any scheme for controlling secular inflation while preserving a full employment policy. We have already noticed that it is not the monopolistic but the competitive markets which are likely to give most trouble to the economic stabilizer in the short run. A speculative inflation in commodity markets, by its impact on the worker's cost of living, is also likely to increase the pressure for wage increases; so that the control of the wholesale price level is by no means irrelevant to the problems of the labor market. The advantage of the Graham standard—under which, it will be recalled, the government stands ready to buy or to sell a fixed "bundle" of commodities at a standard price, somewhat like Marshall's old "symmetallism" proposal applied to many commodities—is that the "cybernetic mechanism" involved plays directly on the markets concerned. An inflationary move in the markets is met immediately both by an increase in stocks of commodity and by a decline in stocks of money held by the speculators. There is every reason to believe, therefore, that such a plan—properly co-ordinated with other elements of economic policy—would be successful in stabilizing the price level of the standard commodities, while permitting any amount of change in the relative price structure. Under severe pressures—e.g., resulting from inflationary war finance—the standard would have to be abandoned; but this, of course, is true of any "standard" as the history of the gold standard abundantly demonstrates.

Another scheme may be mentioned, not because it is in any sense practicable at the moment, but because if all else fails it suggests a possible remedy to be held in reserve. This is the "wage money" plan, by which wages would be paid in a special kind of "wage money," which would have to be exchanged into ordinary money for making purchases, the rate of exchange between wage money and ordinary money being set by the government. The struggle for relative advantage in the labor market could then be conducted in terms of wage money, but if this threatened a general inflation of prices in ordinary money, the value of wage money could be lowered. Thus it might be possible to have a perpetual inflation in wage money, with all the consequent advantages, without producing any inflation in ordinary money—every rise in the wage level in wage money being counterbalanced by a fall in the value of wage money. I am not, of course, suggesting this seriously as a practical proposal, but any proposal, however impractical, which will set people thinking about the problem is worth making.

¹ B. Graham, *Storage & Stability* (New York: McGraw-Hill, 1937).

Finally, there are certain lines of regulative policy which may be followed to reduce the demand for inflation created by collective bargaining. Legislation like the Taft-Hartley Act, which is aimed at weakening "union security" and making the labor leader more dependent on the rank and file, is likely to increase the demand for inflation, and the more bacon he has to bring home the more vigorous will be the pursuit by the labor leader. Conversely any strengthening of the internal security of the labor leader is likely to diminish his aggressiveness. The extreme of such divorce of leaders from the led is to be seen in the Russian trade unions, which have become almost entirely a device to prevent the workers from exercising any force in the direction of higher wages! I do not suggest, of course, that this extreme is desirable, but those who wish to move to the other extreme must be prepared to offer alternative solutions to the problem which will inevitably arise.

Something may be done, also, not merely to lessen the response of union leaders to pressure from below, but also to diminish that pressure. Much of the pressure which may be translated into a demand for wage increases arises, as we well know, from the more strictly "human relations" aspect of the problem, and any steps toward the solution of these problems of status, respect, personal relationships, and the like are likely to ease the demand for money wage increases. Often, as every labor student knows, it is the condition of the toilets rather than of the pocketbook that creates dissatisfaction with the worker's lot. Something can be done also by means of a definite "wage policy" on the part of government, such as the Little Steel Formula, which sets up a standard of public policy by which particular bargains can be judged. To be effective such a formula must be well enough accepted and understood so that it can at least provide union leaders with a satisfactory excuse when the members put pressure on them. It is difficult to see, however, how such a wage policy could be effective in the absence of an elaborate mechanism for the regulation of wages, but the possibility of "wage ceilings" based on employment or price movements is not to be despised.

A different, and much neglected, problem is that of the distribution of incomes, especially of wage incomes, according to the age of the worker. It is quite possible for the wage of every individual to be constantly rising as he gets older, even while the average wage remains unchanged, simply because oldsters are constantly dying off and youngsters taking their place. The contentment of the individual, and hence of the group, may be quite noticeably a function of the extent to which his income rises with age. If the age distribution of incomes is fairly even, so that a man reaches his maximum wage while he is relatively young and has no prospect of advancement thereafter, and *a fortiori*

if wages decline with advancing age, the worker is likely to feel personally frustrated, to feel that he is not "getting anywhere," and this individual frustration may be reflected in group pressures. On the other hand, if wages rise with the age of the worker, the individual can advance even though the group does not, or in any case advances more rapidly than the group; hence he is less likely to be frustrated, and the group is less likely to be dissatisfied. It is evident, then, that the morale of the worker group may be a significant function of the distribution of labor income according to age, and will be higher the more steeply income rises with age. Unfortunately one consequence of the increasing length of life and the increasing numbers of older people is that age loses its scarcity value, and the age-distribution of income is likely to tip away from the older toward the younger groups, with consequent decline in the morale of the population. Something might be done to correct this through the tax system, if taxes were adjusted according to the age of the taxpayer, but this would not particularly contribute to union morale. Unions themselves have a certain tendency to build up privileges for older members—e.g., through seniority—but if the demand for people of various age groups tends to be inelastic, it is very difficult to prevent a change in the age distribution of the population from shifting the distribution of income according to age.

In conclusion, what of the general title of this discussion: "Can Capitalism Dispense with Free Labor Markets?" If by "free" is meant perfectly competitive, the answer is that it always has done so. If by "free" is meant "free from union or employer organization," the answer is that it has done so pretty well up to now. Nevertheless, there are grounds for some slight tempering of optimism in this regard. The labor movement is unquestionably a sociological necessity, and a free (from government domination) labor movement is a strong political support to a liberal capitalism. Economically, however, the labor movement is a slight embarrassment, not because of its impact on the distribution of income, which over the long pull is almost negligible, but because of its impact on the flexibility of the whole price structure. With a strong labor movement we cannot afford to have deflations; and this may mean that we cannot escape a secular inflation. It has been indicated that this problem is not intrinsically insoluble. We shall be deluding ourselves if we think we have solved it.

CAPITALISM AND EQUALITY OF INCOME

STATISTICAL INFORMATION ON THE DISTRIBUTION OF INCOME BY SIZE IN THE UNITED STATES

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During the past fifteen years there has accumulated a fairly sizable amount of data on income size distribution in the United States. A dozen different sample field surveys conducted on a national basis by various government agencies have provided size distributions for families. In addition, low filing requirements for federal individual income tax returns have resulted for recent years in very large coverage of the population in the annual tabulations made by the Bureau of Internal Revenue. In this paper I shall attempt to appraise some of these statistics and indicate a few conclusions relating to inequality of family income distribution that may be drawn from them.

From the field surveys, data on the distribution of families by income level are available for 1935-36 from the Consumer Purchases Study; for 1941 from a survey made jointly by the Bureau of Labor Statistics and the Bureau of Human Nutrition and Home Economics; for each of the years 1944-48 from surveys conducted by the Census Bureau; and for 1945-48 from those conducted by the Federal Reserve Board in conjunction with the Michigan Survey Research Center.² In appraising the results of the surveys it must be remembered that income data were subsidiary to the main purpose of the studies. The 1935-36 and 1941 surveys were aimed primarily at obtaining detailed data on family expenditures and savings, the Census Bureau income surveys for 1944-48 represented extra questions supplementing the questionnaires for its

¹ I am indebted to Hyman B. Kaitz for the computations of measures of income inequality.

² For 1935-36, income statistics on a national basis have been published by the National Resources Committee in *Consumer Incomes in the United States: Their Distribution in 1935-36*, and for individual communities and groups of rural areas in a series of bulletins issued by the Bureaus of Labor Statistics and Home Economics. For 1941, the data are published by the BLS in *Family Spending and Saving in Wartime*, and by the BHNHE in *Rural Family Spending and Saving in Wartime*. The data from the Census Bureau surveys appear in press releases P-S Nos. 22 and 22S, and P-60 Nos. 1-5, and those from the Federal Reserve Board surveys in the *Federal Reserve Bulletin*, July, 1946, and 1947, June, 1948, and July, 1949. A national sample of families was covered for 1939 in the *1940 Census of Population*, but the income questions were restricted to amounts of wage and salary income and presence or absence of \$50 or more of "other" income so that distributions by size of total family income are not available on a nation-wide basis. Other recent field surveys of income undertaken by various government agencies have been restricted in population coverage. They include a sample survey for 1944 by the Bureau of Labor Statistics covering urban families only, several surveys for individual cities by the Bureau of Labor Statistics and the Bureau of the Census, and several for farm families conducted in the Department of Agriculture.

Monthly Report on the Labor Force, and the FRB surveys were taken to provide information on liquid asset holdings of families, later expanded to cover other assets and family savings.

Furthermore, with the exception of the 1935-36 study, all of the surveys comprised very small samples. The 1941 study like those of the Federal Reserve Board covered about 3,000 households, and the Census Bureau surveys ranged from about 7,000 to 25,000. These are very small numbers as compared with the 300,000 income schedules collected in the 1935-36 survey. On the other hand, the later surveys were based on more efficient national samples than the 1935-36 study. For example, the choice of the communities within which families were sampled in 1935-36 was governed by other considerations besides their representativeness for national totals. While recent advances in sampling techniques have made such large samples unnecessary for national totals, many of the recent sample surveys have been so small as to preclude adequate breakdowns for component groups of families.

Differences in Definition Among Surveys

Partly as a result of the special purposes for which they were designed, the various surveys differ in some respects with regard to definition of income measured and of income recipient units. For the period after 1941 the surveys are confined to the money income received by the family, whereas the 1935-36 and 1941 surveys in addition took account of nonmoney items of income such as home-produced food and rental value of owner-occupied homes. Most tabulations of the 1941 survey data, however, were run in terms of money income so that income distributions for that year are comparable in this respect with those from later surveys. For 1935-36, where the tabulated size classes represented total income—the sum of cash and noncash income items—the published data must be adjusted to a money income basis for purposes of comparison with the other surveys. This can be done for major groups of families on the basis of data published by the National Resources Committee showing average amounts of nonmoney income received at each level of total income as reported in the survey. No attempt has been made in the surveys to measure nonmoney income from consumer durables other than houses.

Money income is defined in much the same way in the various surveys. It represents income before deduction of individual income taxes and social security taxes, and covers the calendar year except in the 1935-36 survey where it covered the twelve months preceding the interview date. Money income is defined as the sum of civilian money wages and salaries; farm entrepreneurial income; entrepreneurial income from nonfarm business or profession; interest, dividends, and cash income

from estates and trusts; rents and royalties, including roomer-boarder income; armed forces pay of persons living with the family at the time of the survey; dependency allotments and contributions from members of the armed forces; veterans payments; social security payments, unemployment and workmen's compensation, pensions and assistance; and miscellaneous items such as periodic contributions for support from persons not in the household, periodic payments from insurance policies or annuities, and alimony.

One major difference in income definition refers to farm operator income which after 1941 is measured without regard to the value of the change between the beginning and end of the year in the quantity of crops and livestock on the farm. In years when inventory increases or decreases are large—we are talking of changes in quantities, not prices—the omission of the item produces a distorted income distribution for farmers. The omission of the nonmoney income items results in an exaggerated degree of income inequality for farm as compared with nonfarm families. Recent field surveys have omitted the inventory change and the nonmoney income items largely because they are extremely difficult and expensive to enumerate properly and because of problems of valuation. It is generally recognized that inclusion of both items is necessary for purposes of income analysis.

Differences among surveys in the definition of the income recipient unit—the family and single individual—are of two main sorts: the first referring to the extent to which factors other than relationship were used to distinguish family units and the second to the time period to which the definition pertains. All of the surveys distinguish the family of two or more persons from the single individual. In recent Census Bureau surveys and in special tabulations of the FRB studies the family is defined to include all persons related to each other who live in the same household. The single individual is the person living without relatives in his own dwelling unit, rooming with a private family, or lodging in a hotel or rooming house.³ The same definitions are used in special "family" tabulations of the Federal Reserve Board data. However, in interviewing families and in most of the tabulations of their data, the FRB uses the spending unit rather than the family as a basic unit. The spending unit is confined to those family members who pooled their incomes for major expenses. Family members who did not do so—in many cases single sons or daughters living with their parents—were treated as separate units. A somewhat similar criterion of pooling of incomes was used to distinguish the economic family unit in the 1935-36 and 1941 surveys where it is not feasible to combine the sample data

³ The term "single individual" has no reference to marital status. It is used to distinguish the person living with no relatives from the family of two or more related persons.

into family groups for comparability with later surveys.⁴ Income distributions for spending units show greater concentration in the lower income brackets than those for families because family income is split into two parts when two spending units occur within the family group.⁵

A second difference in family definition among the surveys may operate in the opposite direction; namely, in a net downward bias in the more recent surveys as compared with those for 1935-36 and 1941. In the two earlier surveys the family was "reconstructed" as it existed during the calendar year to which the income data applied. That is, each person who lived as part of the family group for all or a portion of the year was listed on the schedule and his income obtained for the period of his membership in the family. In the more recent surveys, on the other hand, family membership was determined as of the interview date—sometimes several months after the close of the income year—and income for the year was obtained only for those members who were part of the family at the time of the enumeration. Thus the income of persons who died or were inducted into the armed forces would usually be excluded. Some family units, particularly single individuals, who became separate units and started on their first jobs only in the latter part of the income year, previous to which time they had lived with their parents, would be assigned partial-year incomes which were not representative of their actual economic status. Such part-period families and single individuals were excluded from the income distributions published for 1941.

In some periods defining the family as of the date of the interview results in an overstatement of family income, as would be the case when, perhaps because of a housing shortage, two related groups "doubled-up" between the end of the income year and the date of enumeration. "Reconstruction" of the family has not been attempted in the recent small sample surveys because of the difficulties and expense involved. The effect of the deficiency is particularly marked in periods of major

⁴ Single individuals were included in only a few sample cities in the 1935-36 consumer purchases study. Estimates of the income size distribution for this group prepared by the National Resources Committee were based on data from other sources as explained in *Consumer Incomes in the United States*, pp. 67-70.

⁵ Although there is merit in attempting to distinguish separate economic units where they exist within the family, it would be preferable to find more objective criteria than pooling of incomes which must always be extremely difficult to enumerate consistently. Moreover, it is not certain that this criterion is the best one to use for economic analysis. Should we treat a two-generation family group as two separate units in one year when they double-up temporarily only because of a housing shortage and maintain themselves as independent units, and as a single unit in another year because they live together and pool their incomes due to straightened circumstances? Given the choice the two generations would prefer to live separately in both years and for this reason, perhaps, should always be treated as separate units even though this would result in some unusual data on family income and expenditures. This problem is discussed in a recent paper by Dorothy Brady for Vol. 13 of the *Conference on Research in Income and Wealth*.

change in family composition such as occurred directly after the close of the war.

Understatement of Income in Surveys

Turning now to the actual figures, it is not surprising to find an over-all understatement of income in all of the surveys. This arises partly because of memory bias on the part of the housewife who is usually the person interviewed, but also because she may not know or may not want to furnish a true report on income. It may also arise if families in the sample who do not furnish income data—the refusals and not-at-homes—have higher incomes on the average than those who furnish the data, and adequate allowance is not made for this factor in the inflation of the sample results. Understatement can be measured by comparing the aggregate income accounted for by each inflated sample survey with the independently estimated total of the National Income Division of the Department of Commerce. Comparisons cannot be made directly because account must be taken of conceptual differences between the Commerce Department's "personal income" and the surveys' "consumer income" and of variations in definition among the several surveys. The major adjustments required in the Department of Commerce series refer to nonmoney income items, military and other income accruing to persons outside the family universe covered in the particular survey, income flowing to fiduciaries and nonprofit organizations, noncorporate inventory changes, and social security deductions.

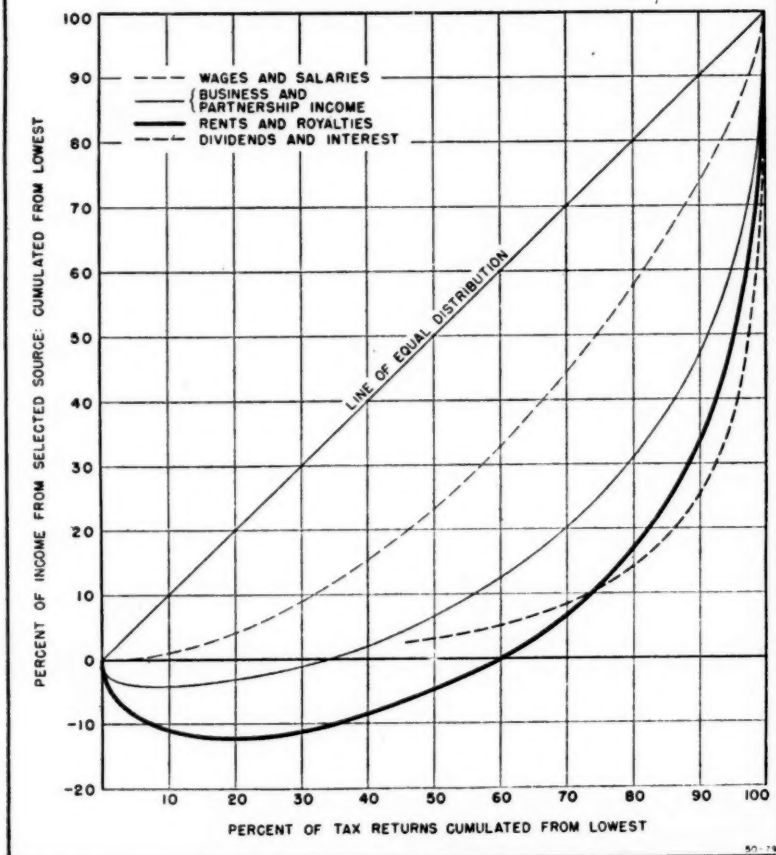
I have discussed these adjustments and measures of the understatement for each survey in some detail in another paper.⁶ In summary, it was found that most of the field surveys varied in coverage from about 75 to somewhat over 90 per cent of the adjusted Commerce totals. Percentage coverage was not related to sample size. Instead it appeared to vary with such factors as family mobility—the 1945 surveys taken in early 1946 showed relatively low income coverage—and the extent to which the sample design or the adjustment made for nonreporting families was controlled by factors closely related to income, such as rental value of the family home. Probably a number of intangible factors, such as the quality of field enumerators, also had a good deal to do with the sample results.

More important than variations in over-all understatement among the surveys is the distribution of this understatement among the various income sources—wages and salaries, business income, interest, dividends, etc. If it were found that successive surveys resembled each other

⁶"Appraisal of Basic Data Available for Constructing Income Size Distributions," Vol. 13 of the *Conference on Research in Income and Wealth* (National Bureau of Economic Research).

in this respect, it could be assumed that they give a fairly satisfactory picture of changes in the degree of equality in income distribution between successive periods, even though the income size distributions have a downward bias for any particular year. Unfortunately, this is not the case. The surveys for which income source breakdowns are available resemble each other in that wages and salaries are usually better covered than entrepreneurial income, and rental income somewhat better

Chart I
**LORENZ CURVES FOR SELECTED INCOME
SOURCES BY THEIR OWN SIZE**
FEDERAL INDIVIDUAL INCOME TAX RETURNS, 1945



than the very poorly covered category of interest and dividend income. But there were marked differences among the surveys in this pattern. Comparing four of the surveys—the BLS-BHNHE survey for 1941 and the Census Bureau surveys for 1944-46—it is found that coverage of wages and salaries varied only between 86 and 92 per cent, but for entrepreneurial income the range was from less than half to somewhat more than 100 per cent coverage, for interest and dividends from 16 to 32 per cent, and for rental income from 46 to 84 per cent.⁷ The highest percentage coverage of entrepreneurial income and the lowest coverage of interest and dividends were found in the same survey, and the highest wage and salary coverage was coupled with relatively low coverage of entrepreneurial income.

We know that there are major differences in the degree of equality of the distribution of these various income sources, with wages and salaries more equally distributed than business and professional income, followed by rents and interest and dividend receipts. This is illustrated by the data from federal individual income tax returns for 1945 shown in Chart I. The chart shows cumulated percentages of total income from each selected source accounted for by cumulated percentages of tax returns reporting receipt of the specified source, starting with those reporting the smallest amounts of income (or the largest deficits). Ratios of concentration, which vary inversely with extent of equality, are .38 for wages and salaries, .68 for business and partnership income, and .82 for interest and dividends.⁸ Differences among surveys in the extent of coverage of the various income sources may therefore obscure the actual changes in income distribution which took place between survey years. Before comparing the various surveys we should introduce differential adjustments for the various types of missing income, recognizing that such adjustments are themselves open to error, but that they produce a more comparable set of statistics than the original sample surveys.

⁷ These figures are from Table 3 of the paper cited in the preceding footnote. Comparisons cannot be made for the Federal Reserve Board surveys which do not provide breakdowns of total income by income source.

⁸ The ratio of concentration is the per cent of total area under the diagonal of equal distribution that lies between the Lorenz curve and the diagonal. Ratios were computed using the trapezoidal formula (given in Dwight Yntema's article, "Measures of the Inequality in the Personal Distribution of Wealth or Income," *Journal of the American Statistical Association*, December, 1933, p. 428) which yields slight underestimates. In the present instances the bias probably does not exceed 5 per cent, and since the underestimates are of approximately the same order of magnitude the comparisons are not impaired. No ratio was computed for rental income because of the large negative sector in the Lorenz curve. Similar differences in the distribution of the various income shares have been discussed in some detail on the basis of data for Wisconsin. See Hanna, Pechman and Lerner, *Analysis of Wisconsin Income*, pp. 117-131. See also Blakey, Weinfeld, Dugan, and Hart, *Analysis of Minnesota Incomes, 1938-39*, pp. 131-132. It should be noted that Lorenz curves based on federal individual income tax returns for 1945 exclude small income shares accruing to persons receiving incomes under \$500, other than those reported by persons with incomes less than this legal minimum who filed for refund of withholding taxes.

At the same time the survey results should be checked and revised by data from individual income tax returns. This is necessary to measure the extent to which high-income groups may be underrepresented in the survey results. To make such a check, the statistics from tax returns, which for recent years represent individual persons or husband-wife units, must be combined into family units. For very recent years, low filing requirements result in such broad coverage of the population in the income tax tabulations that it is possible to prepare family distributions from the returns to check the survey results for a very large portion of the income scale. In using the tax returns, however, account must be taken of the fact that certain income sources, e.g., farm income and interest income, are understated.⁹ On the other hand, sources such as wages and salaries and nonfarm business and professional income are apparently better covered on the returns than in many of the surveys. Moreover, data from returns in the top brackets are more reliable than those that can be obtained from small sample field surveys.

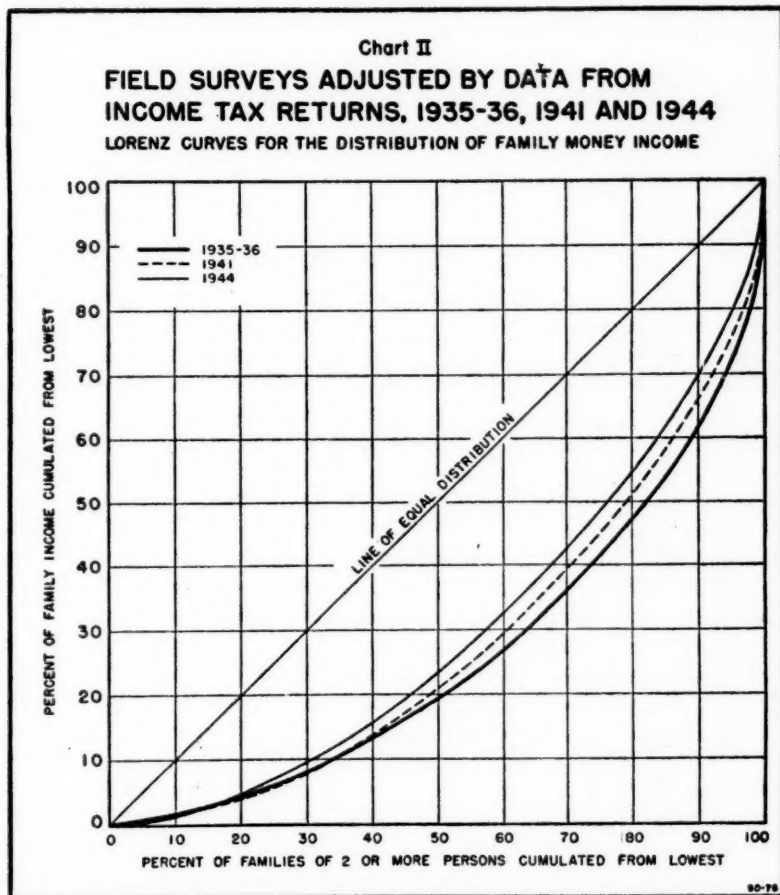
Income Inequality as Measured by the Field Surveys

For three of the surveys, correction of this sort has been attempted at least in part. For 1935-36, Miss Kneeland and her staff at the OPA reworked the data published by the National Resources Committee to bring them into line with Department of Commerce estimates, to take into account income tax tabulations not available when the NRC report was prepared, and to eliminate items of nonmoney income for comparability with later surveys which covered cash income only. For 1941, Pechman of the Treasury Department prepared a revised "tail" of the survey distribution based on income tax data not available when the BLS study for that year was published. For 1944, Liebenberg and Kaitz of the Commerce Department estimated a family distribution based largely on income tax returns, but relying in part on field survey data for that year for translating data for tax returns into family units and for supplementing the tax return distribution at the bottom of the income scale.¹⁰ For the later surveys similar adjustments have not as yet been completed.

⁹ Amounts of income from the various income sources reported on federal individual income tax returns in recent years are compared with the Commerce Department's totals in Table 8 of the paper cited in footnote 6. It would be desirable also to check the distributions from field surveys against the large body of data on distribution by size of wage and salary income available for "covered" workers from the Bureau of Old-Age and Survivors Insurance. Unfortunately, in the absence of statistical "bridge" material between the two sets of income data, adequate checks of this sort have not been possible.

¹⁰ The revised distribution of families for 1935-36, which has not been published, was made available by Miss Kneeland. It includes a new "tail" developed from detailed income tax data, particularly those from special tabulations of 1936 tax returns in which separate returns of husbands and wives were matched and combined, and capital gains and losses eliminated. Limitations of time and personnel in the OPA work made it impossible to introduce any other major revisions in the family distribution except for the removal of

We shall examine first the three earlier surveys. Chart II shows Lorenz curves for 1935-36, 1941 and 1944 based on the adjusted distributions derived by the three authors mentioned above. The curves show cumulated percentages of family money income accounted for by cumulated percentages of families, starting with those with lowest cash incomes. In all instances income represents annual money income before taxes. The



nonmoney income items and adjustment to the Commerce Department estimates of total income. The 1941 distribution appears in *Distribution of Income Before and After Federal Income Tax, 1941 and 1947*, and the 1944 distribution in *Constructing a Size Distribution of Family Income from Income Tax and Field Survey Data: 1944*, for Vol. 13 of the *Conference on Research in Income and Wealth*. Pechman's distribution for families before tax for 1941 makes only minor changes in the field survey results as published, after adjustment for underrepresentation at "top" income brackets, by the BLS.

chart is confined to families of two or more persons. Single individuals are excluded because variations in the definition of the unit and in the coverage of the different surveys introduce too many elements of incomparability in the survey income data for this heterogeneous group.¹¹

Some of the changes in underlying totals should be kept in mind in examining the chart. Total consumer money income, as measured by the Commerce Department series adjusted to the field survey income concept, increased from 58 billion dollars in 1935-36 to 86 billion in 1941 and 140 billion in 1944 (Table 1). Mean income per family and single individual increased from \$1,500 in 1935-36 to \$2,100 in 1941 and to \$3,400 in 1944. Using the consumers' price index as a deflator, these averages in 1944 dollars were \$1,900 in 1935-36 and \$2,500 in 1941 as compared with \$3,400 in 1944.

Chart II indicates that for this period these increases were accompanied by an increase in equality of income distribution and that for low-income groups improvement in relative position took place only after 1941. The lowest 40 per cent of families received 13 per cent of total family income in 1935-36 and 1941, and 16 per cent in 1944. The highest 20 per cent of families received 53 per cent of total income in 1935-36, 49 per cent in 1941, and 45 per cent in 1944. Ratios of concentration which vary inversely with degree of equality are .482 for 1935-36, .441 for 1941, and .403 for 1944. The adjusted survey data, it may be noted, show much greater variation than the original sample data before adjustment. Lorenz curves from the unadjusted surveys for the same three years have been found to be extremely close to each other and one could easily draw the conclusion from them that there had been no change in inequality in this period and that such small variations as do exist be explained by sampling or other aberrations in the statistics.¹²

Changes in income equality can be seen more clearly by examining what happened to the average income of different income groups, based on the adjusted distributions. The increase in over-all average income of families (in current dollars) was 128 per cent from 1935-36 to 1944. If there had been no change in income inequality this same percentage increase would be found for each group, for example, for each quintile of families. Instead, the increase was 157 per cent for the 20 per cent of families with lowest incomes, and 182 per cent for the second quintile (Table 2). In contrast, the increase was 95 per cent for the top quintile. The highest relative increase between 1935-36 and 1941 was

¹¹ Aside from other differences mentioned earlier, the surveys vary in the extent to which the sample universe included the quasi-household population—persons living in hotels, large lodging-houses and the like—which accounts for about 12 per cent of all single individuals. Persons in institutions, including members of the armed forces not living with their families, are not included in the sample universe of any of the surveys.

¹² Ratios of concentration computed from the unadjusted surveys were .408 for 1935-36, .410 for 1941, and .400 for 1944.

shown for the third quintile, and between 1941 and 1944 for the lowest 40 per cent of families. It should be emphasized that because families change their relative income position from one period to another and because new families are formed and old ones die off, these figures do not tell us what has happened to the incomes of the same families from one year to another.

TABLE 1
DISTRIBUTION OF CONSUMER MONEY INCOME BY SOURCE,
1935-36, 1941 AND 1944-48*
Amounts in Billions of Dollars

	1935-36	1941	1944	1945	1946	1947	1948
Civilian wages and salaries	37.7	57.9	93.5	92.8	101.5	116.2	128.7
Family military income	.7	.5	7.3	14.8	11.6	8.5	6.8
Social security, unemployment compensation, nonveterans pensions, etc.	1.2	2.2	1.9	2.5	3.5	3.7	4.2
Nonfarm entrepreneurial income	5.2	9.8	16.5	18.1	21.8	23.7	23.7
Farm entrepreneurial income	2.8	4.4	9.4	9.6	10.8	13.3	12.8
Interest and dividends	7.1	7.3	7.4	7.8	9.3	10.7	11.6
Rent and roomer-boarder income	2.3	3.6	4.9	4.7	5.5	6.1	6.0
Other money income	.4	.4	.6	.7	.9	.9	1.0
Total consumer money income†	57.4	86.1	141.5	151.0	164.9	183.1	194.8
Adjusted consumer money income‡	58.0	86.3	140.3	153.8	165.2	182.7	194.3
Number of families and single individuals (in millions)§	38.4	41.4	41.0	42.3	43.8	45.0	46.4
Mean income per family and single individual (dollars)	1,510	2,086	3,419	3,633	3,769	4,058	4,191
Percent Distribution							
Civilian wages and salaries	65.7	67.3	66.0	61.5	61.6	63.6	66.0
Family military income	1.3	.6	5.2	9.8	7.0	4.6	3.5
Social security, unemployment compensation, nonveterans pensions, etc.	2.1	2.5	1.4	1.6	2.1	2.0	2.2
Nonfarm entrepreneurial income	9.1	11.3	11.7	12.0	13.2	12.9	12.2
Farm entrepreneurial income	4.8	5.1	6.6	6.3	6.6	7.3	6.6
Interest and dividends	12.4	8.5	5.3	5.2	5.7	5.8	5.9
Rent and roomer-boarder income	3.9	4.2	3.4	3.1	3.3	3.3	3.1
Other money income	.7	.5	.4	.5	.5	.5	.5
Total consumer money income	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Estimates of income for most years are from Table 1 of the paper on *Appraisal of Basic Data Available for Constructing Income Size Distributions*. Consumer money income, which attempts to match as closely as possible the income concept covered in field surveys of family income, was derived by making a number of adjustments in the Commerce Department's "personal income" series as described in that paper.

† Covers consumer money income of noninstitutional population as of end of calendar year. For 1935-36, the estimates for the two calendar years were averaged.

‡ Preceding line adjusted to correspond with income definitions and survey dates of the various income surveys. For discussion, see notes to Table 3 of paper cited above.

§ Represents estimated number of units as of June, 1936, December, 1941, and for 1944-48, May, 1945, and April, 1946-49. These correspond to the dates of the various surveys (Census Bureau surveys for 1944-48). For derivation, see notes to Table 4 of paper cited above.

A qualification of the figures must be introduced at this point. Adjustments in the survey data for the three years were carried through by three different authors using procedures which though basically similar were not entirely alike. For all three distributions the basic adjustment

TABLE 2
QUINTILE DISTRIBUTIONS OF FAMILY MONEY INCOME, FROM FIELD SURVEYS ADJUSTED BY DATA FROM INCOME TAX RETURNS, 1935-36, 1941, AND 1944*
(Data underlying Chart II)

Families Ranked from Lowest to Highest Income	(1) Percent of Total Income 1935-36	(2) 1941	(3) 1944	(4) Top Income of Quintile 1935-36	(5) 1941	(6) 1944
Lowest 20%	4.0	3.9	4.5	\$ 543	\$ 777	\$1,539
Second 20%	8.9	9.6	11.0	931	1,454	2,618
Third 20%	13.7	15.6	16.6	1,365	2,132	3,628
Fourth 20%	20.4	22.1	22.5	2,122	3,048	4,955
Top 20%	53.0	48.8	45.4			
All families†	100.0	100.0	100.0			
	(7) Mean Income Per Family 1935-36	(8) 1941	(9) 1944	(10) Percent Increase in Mean Income from: 1935-36 to 1941	(11) 1941 to 1944	(12) 1935-36 to 1944
Lowest 20%	\$ 331	\$ 445	\$ 850	34	91	157
Second 20%	740	1,102	2,087	49	89	182
Third 20%	1,132	1,786	3,123	58	75	176
Fourth 20%	1,692	2,538	4,240	50	67	151
Top 20%	4,395	5,586	8,566	27	53	95
All families†	1,658	2,291	3,774	38	65	128

* Represents money income before taxes in current dollars for families of two or more persons. The figures in the first four columns are from the studies cited in footnote 10 of the text. In deriving the other columns, the distributions of families by income level for 1941 and 1944 as given in those studies required adjustment because they showed differential understatement of total money income as compared with the estimates in Table 1; namely, 7 per cent for 1941 and 11 per cent for 1944. The adjustment was made by assuming that incomes at all levels in each year were understated by these same percentages. This was doubtless not the case but the arbitrary adjustment was necessary to avoid figures in columns 10-12 which would reflect the larger understatement of aggregate income in the distributions for the later years.

† The total number of families and aggregate and average family income underlying the table are shown below. Similar estimates for single individuals (not covered in the table) based on the studies referred to above are also shown. Income figures have been inflated as indicated in footnote above.

	Number of Units (in millions)			Aggregate Money Income (in billions)			Mean Income Per Unit (dollars)		
	Fami- lies	Sin- gles	To- tal	Fami- lies	Sin- gles	To- tal	Fami- lies	Sin- gles	To- tal
1935-36	30.4	8.0	38.4	50.5	7.5	58.0	1,658	947	1,510
1941	32.9	8.5	41.4	75.4	10.9	86.3	2,291	1,285	2,086
1944	33.4	7.6	41.0	126.2	14.1	140.3	3,774	1,860	3,419

was to amend the survey data by fitting on an upper "tail" of families derived from income tax returns. In deriving this "tail" an adjustment to allow for understatement of income on tax returns was made in 1935-36 but was not introduced into the distributions for 1941 and 1944. The nature of the adjustment was such as to increase the degree of inequality of the 1935-36 distribution by increasing the percentage of total income found in the top income brackets. But an examination of the underlying figures indicates that even had the adjustment for understatement on tax returns been omitted from the 1935-36 adjustment procedure, the Lorenz curve for that year would have been to the right of that for 1941, though somewhat closer than appears in Chart II.¹³

Probably the actual situation was fairly close to that shown in Chart II. Although the movement toward greater equality is somewhat exaggerated in the chart because of differences in adjustment techniques, some change in that direction probably did occur, particularly after 1941. Data from federal individual income tax returns confirm this movement for the upper portion of the income scale. Pareto coefficients, computed from slopes fitted to tax returns down to \$10,000 of income were 1.85 for 1936, 1.92 for 1941, and 2.09 for 1944.¹⁴

Moreover, for the large component group of wage and salary families—those whose primary income was from this source—the surveys for 1935-36 and 1944 show that accompanying the rise in employment

¹³ This difference in adjustment procedure may be viewed in another way. The distributions for 1941 and 1944, unlike that for 1935-36, require further correction to allow for income still unaccounted for. "Missing" income in Pechman's 1941 distribution amounts to 7 per cent of the total, and in the Liebenberg-Kaitz 1944 distribution to about 11 per cent. To the extent that adjustment to add such missing income would result in a larger proportionate increase of income for families in higher- than in lower-income brackets, the curves for these years shown in Chart II would shift somewhat closer to that shown for 1935-36. There is some evidence that this might be the case. For example, there was much larger percentage understatement of entrepreneurial income than of wage and salary income in the 1944 individual income tax returns which represented the main basis for the adjusted distribution for that year. A shift of this sort in the curve would correspond conceptually with the allowance for understatement on income tax returns made in preparing the top "tail" of the 1935-36 distribution.

¹⁴ Pareto lines were fitted on double log paper to the data by observation. Some of the distributions fitted to the tax data varied from straight lines in a sufficiently nonrandom manner to discourage attempts at more careful and "objective" fitting. Examination of the charts reveals that the rank order given above for the three years, 1936, 1941, and 1944, in terms of the Pareto coefficient would not be altered by some other method of fitting. In other words, the Pareto coefficients computed here may be regarded as reasonably adequate indices although the distributions do not follow the Pareto curve in a precise way. It may be noted that the slope for 1936, 1.85, is larger than that computed by N. O. Johnson and quoted by Rufus Tucker in his article, "The Distribution of Income among Income Taxpayers in the United States, 1863-1935," *Quarterly Journal of Economics*, August, 1938, p. 551. Tucker's value of 1.72 was obtained by fitting a Pareto line through the income points \$5,000 and \$500,000. It is interesting to note that Pareto coefficients computed from tax returns in Great Britain by Dudley Seers (*Bulletin of Oxford University Institute of Statistics*, October, 1948, and September, 1949) also increased in this period from 1.60 in 1938 to 1.86 in 1944. Thereafter, the G.B. coefficients remained fairly stable at 1.87 in 1945, 1.91 in 1946, and 1.88 in 1947.

TABLE 3
QUINTILE DISTRIBUTIONS OF FAMILY MONEY INCOME, FROM CENSUS
BUREAU FIELD SURVEYS, 1944-48*

Families Ranked from Lowest to Highest Income	(1)	(2)	(3)		(4)	(5)	(6)
	1944	Percent of Total Income		1946	1947	1948	
		1945					
		Survey	Adjusted				
Lowest 20%	4.0	4.8	4.6	3.7	4.7	4.7	
Second 20%	10.6	12.0	11.9	11.2	11.5	11.7	
Third 20%	16.6	17.3	16.7	16.6	16.5	16.8	
Fourth 20%	22.9	23.4	22.9	22.8	22.5	22.5	
Fifth 20%	45.9	42.5	43.9	45.7	44.8	44.3	
All families†	100.0	100.0	100.0	100.0	100.0	100.0	
	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Mean Income Per Family				Percent Increase in Mean		
	1944	1945	1947	1948	1941	1945	1941
		(adjusted)			to	to	to
					1945	1948	1947
Lowest 20%	\$ 757	\$ 941	\$ 1,056	\$ 1,056	111.5	12.2	137.3
Second 20%	2,035	2,380	2,585	2,655	116.0	11.6	134.6
Third 20%	3,183	3,406	3,697	3,800	90.7	11.6	107.0
Fourth 20%	4,379	4,628	5,041	5,104	82.3	10.3	98.6
Fifth 20%	8,794	8,696	10,027	10,050	55.7	15.6	79.5
All families†	3,829	4,048	4,481	4,663	76.7	15.2	95.6

* Represents money income before taxes in current dollars for families of two or more persons. The distributions in columns 1, 2, and 4-6 are based on Census Bureau survey data (Census Bureau-Bureau of Agricultural Economics survey data for 1946). However, for the \$10,000 and over income class, the surveys reported only the number of families falling in the class and did not request amounts of income. Minimum and maximum estimates of the aggregate income derived for this income group are explained in the paper on "Appraisal of Basic Data Available for Constructing Income Size Distributions," notes to Table 4. The maximum estimates were used here based on the average incomes for the several income sources as reported on federal individual income tax returns with adjusted gross incomes of \$10,000 or more, weighted by the numbers of families in the surveys reporting receipt of the various income sources within the \$10,000 and over income class. For 1945 the average income derived in this manner for the \$10,000 and over class was unusually low, largely because relatively few families in the class in the survey reported receipt of entrepreneurial income. To correct for this, the adjusted distribution in column 3 was estimated by substituting the higher mean for the class which had been derived for 1944. For 1946 the relatively small share of income received by the lowest quintile was a reflection of the relatively large number of families reporting deficits in the survey for that year. This may have been due in part to the fact that the enumeration of farm families was conducted on a somewhat different basis for 1946 than in earlier and later surveys. In deriving columns 7-10, the distributions were adjusted to meet the income totals shown in Table 1, as explained in the notes to Table 2.

† The total number of families and aggregate and average family income underlying the table are shown below. Similar estimates for single individuals (not covered in the table) are also shown. Income figures have been inflated as indicated in footnote * of Table 2.

	Number of Units (in millions)			Aggregate Money Income (in billions)			Mean Income Per Unit (dollars)		
	Fami- lies	Sin- gles	To- tal	Fami- lies	Sin- gles	To- tal	Fami- lies	Sin- gles	To- tal
1944	33.4	7.6	41.0	128.0	12.3	140.3	3,829	1,615	3,419
1945	34.9	7.4	42.3	141.4	12.4	153.8	4,048	1,673	3,633
1946	36.2	7.6	43.8	151.4	13.8	165.2	4,179	1,811	3,769
1947	37.3	7.7	45.0	167.0	15.7	182.7	4,481	2,026	4,058
1948	38.5	7.8	46.4	179.7	14.6	194.3	4,663	1,864	4,191

there was a marked movement toward greater equality in income distribution in this period (Table 5).

Finally, shifts in the distribution of total income among the various income sources—wages and salaries, business income, dividends, etc.—lend support to a change toward greater equality in income distribution from 1935-36 to 1944. In 1944 total income was more heavily weighted with the more equally distributed income sources than was true in 1935-36. Using the Commerce Department's "personal income" series adjusted to the field surveys' income concept, we find that in 1935-36 civilian wages and salaries represented 66 per cent of total consumer money income (Table 1). In 1941, this income share was only slightly higher—67 per cent—but in 1944, wages and salaries together with the military income flowing to families—largely family dependency allowances—accounted for 71 per cent of the total. When social security payments, pensions, etc., are added, the total of these income shares represented 69 per cent of total income in 1935-36, 70 per cent in 1941, and 73 per cent in 1944. This increase was counterbalanced by a decline in the relative importance of cash interest and dividends from 12 per cent of total money income in 1935-36 to 8 per cent in 1941 and 5 per cent in 1944. On the other hand, business and professional income—shares which are more unequally distributed than wages and salaries

TABLE 4
QUINTILE DISTRIBUTIONS OF FAMILY MONEY INCOME, FROM FEDERAL
RESERVE BOARD FIELD SURVEYS, 1945-47*

Families Ranked from Lowest to Highest Income	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Percent of Total Income				Mean Income Per Family			Percent Increase in Mean Income from:		
								1941	1945	1941
	1945 Survey	Adjusted	1946	1947	1945 (Adjusted)	1946	1947	1945	1947	1947
Lowest 20%	4.9	4.8	5.1	4.8	\$ 945	\$1,080	\$1,077	112.4	14.0	142.0
Second 20%	11.3	11.0	11.2	10.6	2,190	2,345	2,369	98.7	8.2	115.0
Third 20%	17.0	16.6	16.1	15.6	3,299	3,376	3,505	84.7	6.2	96.2
Fourth 20%	22.9	22.3	21.9	21.8	4,441	4,585	4,889	75.0	10.1	92.6
Fifth 20%	43.9	45.3	45.7	47.2	9,020	9,579	10,578	61.5	17.3	89.4
All families†	100.0	100.0	100.0	100.0	3,981	4,174	4,487	73.8	12.7	95.9

* Represents money income before taxes in current dollars for families of two or more persons. The distributions in columns 1, 3, and 4 are based on data from Federal Reserve Board surveys. For 1945, the average income of families in the \$10,000 and over income class obtained in the survey was unusually low as compared with other years and an adjustment to correct for this is made in column 2 where the mean income for the class obtained in the 1946 survey was substituted. In deriving columns 5-7, the distributions were adjusted to meet the income totals shown below, as explained in the notes to Table 2.

† The total number of families and aggregate and average income underlying the table are shown below. Similar estimates for single individuals (not covered in the table) are also shown. These figures differ somewhat from those given in footnote † of Table 3 mainly because of differences in the dates of enumeration of the Federal Reserve Board and Census Bureau surveys.

	Number of Units (in millions)			Aggregate Money Income [*] (in billions)			Mean Income Per Unit (dollars)		
	Families	Singles	Total	Families	Singles	Total	Families	Singles	Total
1945	34.7	7.3	41.9	138.0	13.0	151.0	3,981	1,801	3,604
1946	35.9	7.5	43.3	149.7	15.2	164.9	4,174	2,035	3,805
1947	37.0	7.7	44.7	166.1	16.8	182.9	4,487	2,178	4,089

TABLE 5
PERCENT DISTRIBUTION OF WAGE AND SALARY FAMILIES AND
THEIR MONEY INCOME, 1935-36 AND 1944*

Family Income Level	Wage and Salary Families			Family Money Income		
	1935-36 Excluding Relief Families	Including Relief Families	1944	1935-36 Excluding Relief Families	Including Relief Families	1944
Under \$1,000	28.8	39.7	8.4	10.6	15.7	1.6
1,000- 2,000	44.5	39.2	19.1	35.9	35.9	9.1
2,000- 3,000	17.4	14.0	26.0	23.3	21.5	20.1
3,000- 4,000	5.3	4.1	23.3	10.0	8.9	24.9
4,000- 5,000	1.6	1.2	11.4	3.9	3.5	15.9
5,000-10,000	1.6	1.2	10.6	6.1	5.4	20.8
10,000 and over	.8	.6	1.2	10.2	9.1	7.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

* Covers income before taxes for families of two or more persons. Figures for 1935-36 are from worksheets used in preparing report on *Consumer Incomes in the United States: Their Distribution in 1935-36* (National Resources Committee). Includes families classified in 1935-36 on the basis of major source of family earnings as "wage earners," "clerical," "salaried business," and "salaried professional." Relief families are those who received any direct or work relief from any source at any time during the year. Data for 1935-36 differ from those for 1944 in that nonmoney income is included in the earlier year. Figures for 1944 are from Census Bureau survey for that year. Includes families with \$1.00 or more of wage or salary income excluding those reporting (a) any farm entrepreneurial income or loss or (b) any non-farm entrepreneurial income in cases where it exceeded their wage or salary income. Estimates of aggregate income in the \$10,000 and over class in 1944 derived as explained in the notes to Table 3.

—were relatively more important in 1944 than in 1935-36, accounting for 18 as compared with 14 per cent of total income.

For the period after 1944 the surveys have not been adjusted on the basis of data from income tax returns as was done for the earlier samples so that conclusions for recent years must be regarded as tentative. Distributions of family income by quintiles are shown for the Census Bureau surveys for 1944-48 in Table 3 and for the Federal Reserve Board surveys for 1945-47 in Table 4. The figures indicate a continuance of the movement toward equality from 1944 to 1945. After that year, however, there is evidence that this was arrested. The share of total income accruing to the top quintile which declined from 1935-36 through 1945 (Tables 2 and 3) showed a slight increase in more recent years (Tables 3 and 4). However, the year-to-year changes in the percentages are very small and may reflect nothing more than sampling variations or differential biases in the several surveys. On the other hand, a movement away from equality after 1945 would be in line with the substantial decline in family military income after the end of the war, and the sharp percentage rise in entrepreneurial and property income occurring between 1945 and 1946—a rise which was about twice

as large as the corresponding percentage rise for civilian wages and salaries.¹⁵

In summary, the surveys indicate that there was a movement toward equality in income distribution from 1935-36 to 1944 which was significant for the low-income groups during the war years and which was arrested after 1945. These conclusions are reasonably in accord with the findings of Dr. Kuznets, who has made a detailed examination of the share of income received by the top 1 and 5 per cent of the population since 1913, based on data from federal individual income tax returns. His tables show that the share of the top 5 per cent declined from 1935-36 to 1941 and again to 1944.¹⁶ This corresponds to the movement shown in Chart II, except that Kuznets' figures show a greater drop after 1941 than the adjusted surveys. A small upturn in the share of the top group occurs in his figures for 1945; the field survey data indicate that the percentage shares of income accruing to the lowest quintiles continued to increase in that year.

Kuznets also shows that the decline in the share of the top 5 per cent of the population actually began in 1929. It would be interesting to know how inequality for the whole range of incomes compared at that time with later years. If we were to introduce without adjustment the family income distribution for 1929 from the Brookings Institution study into Chart II, we would find the Lorenz curve for that year falling to the right of the curve for 1935-36 for the entire income range. The curve is not shown here because the inclusion in the 1929 distribution of sizable amounts of capital gains and losses on the one hand and of nonmoney items of income on the other results in an income classification which differs too much from that used in later studies to make for meaningful statistical comparison. Data on number of individual income tax returns reporting capital gains and losses at different income levels which are necessary in order to remove such gains and losses from the 1929 distribution are unfortunately not available.¹⁷

¹⁵ The income concept used in the field surveys does not include undistributed corporate profits which more than tripled between 1945 and 1948.

¹⁶ "Shares of Upper Income Groups in Income and Savings," presented at the Conference on Research in Income and Wealth, April, 1949, to be published shortly by the National Bureau of Economic Research. Kuznets' classification is not families or income recipients. His upper 1 and 5 per cent refer to the 1 and 5 per cent of the population represented on tax returns starting from returns at the top of the distribution and cumulating down, and including persons whose income is reported plus those for whom deductions are claimed on the returns. In his Appendix Table I-3, Kuznets estimates that the top 5 per cent of the population accounted for 29.1 per cent of total income (economic income variant) in 1935-36, 26.0 per cent in 1941, and 18.9 per cent in 1944. These compare with the following percentages of aggregate family money income accounted for by the top 5 per cent of families of two or more persons, as read from Chart II: 28.5 per cent in 1935-36, 24.5 per cent in 1941, and 21.2 per cent in 1944. The two series differ with respect to both the unit of measurement and the definition of aggregate income so that exact agreement is not to be expected.

¹⁷ According to the Brookings Institution study, the top 20 per cent of families of two

TABLE 6
AVERAGE SIZE OF FAMILY FOR QUINTILES OF FAMILIES,
1935-36, 1941, 1944 AND 1947*

Families Ranked from Lowest to Highest Incomes	Mean Number of Persons Per Family			
	1935-36	1941	1944	1947
Lowest 20%	3.71	3.55	3.09	3.24
Second 20%	3.91	3.63	3.37	3.49
Third 20%	3.91	3.67	3.62	3.62
Fourth 20%	3.85	3.65	3.73	3.68
Top 20%	3.96	4.00	3.82	4.11
All families	3.87	3.70	3.52	3.64

* Covers families of two or more persons only. Figures for 1935-36 are based on distributions of families and total number of persons in families by family total income level given in *Family Expenditures in the United States* (National Resources Planning Board), Table 335. The present figures were derived by adjusting those distributions to remove nonmoney income; i.e., to classify families and family members by family money income classes as is done in later surveys, by using the percentages of nonmoney income at each total income class as given in *ibid.*, Tables 110-112. Figures for other years derived from distributions of families by family size groups and family money income level, as given for 1941, in *Family Spending and Saving in Wartime* (Bulletin No. 822, U. S. Department of Labor), Table 1A, and for 1944 and 1947 in unpublished data underlying press releases of the Bureau of the Census P-S No. 22 and P-60 No. 5. For each year the figures were adjusted to agree with revised estimates of the total number of families and of family members as of June 30, 1936, December 31, 1941, May, 1945 (the date of enumeration of the Census Bureau survey covering 1944), and April, 1948 (the date of the similar enumeration for 1947).

All of the discussion up to this point has related to the distribution of family money incomes in current dollars, before tax and without allowance for changes in the composition of families at different income levels. To the extent that differential changes in cost of living occurred for different groups of families during the period, the measures of inequality presented here are of course not representative of relative shifts in real incomes. Unfortunately, we do not have the necessary statistics to determine whether this was the case and if so to make the proper allowance.

For the effect on the family money income distribution of removing federal income taxes, we have one recent study by Pechman covering the years 1941 and 1947, based in large part on data from the BLS and FRB surveys for those years.¹⁸ As we have seen there appears to have

or more persons received 58.3 per cent of total income (including capital gains and selected items of nonmoney income) in 1929 (interpolated from Tables 37 and 39 of *America's Capacity to Consume*). Capital gains accounted for somewhat over 5 billion dollars of the 77 billion of total income assigned to families of two or more persons in the Brookings study (Kuznets, *op. cit.*). Even with extreme assumptions as to the distribution of capital gains, it is doubtful whether removing such gains, and at the same time excluding non-money income, would reduce the percentage share of the top quintile in 1929 to as low a figure as the 53 per cent shown for the top 20 per cent in 1935-36 (Table 2).

¹⁸ *Op. cit.*, Chart I and Table 2. Pechman's comparisons of the distributions before and after tax refer to families and single individuals combined, whereas the distributions in the present paper cover families only. For this reason, and also because his figures have not been adjusted to agree with income totals based on the Department of Commerce series (as given here in Table 1), various of Pechman's figures for 1941 and 1947 differ from those presented here.

been a net movement toward equality in the distribution of income before tax between 1941 and 1947 (Tables 3 and 4). Pechman's figures show that this movement is greater when income after tax is considered. For the lowest quintile of consumer units, the percentage increase in average income from 1941 to 1947 was found to be the same whether the units were ranked in the two years by income before or after tax. For the topmost quintile, on the other hand, the per cent increase was only four-fifths as large using the classification by income after tax than was true on the before-tax basis.

Unfortunately, similar data on a comparable basis are not available for most of the other years considered here. Recent small field surveys have not attempted to obtain data from the family on amounts of taxes paid, partly because of the danger of overloading the schedules and partly because such questions are apt to increase the already sizable nonresponse rate. But by requesting information on family income and family composition in sufficient detail it is possible to estimate a tax liability for each family in the sample and so construct an income size distribution after tax. This has been done in the last two FRB surveys and is planned for inclusion in future ones as well.

When account is taken of changes in size of family the movement toward equality is greater than the over-all family figures suggest. The average size of family decreased by about 6 per cent from 1935-36 to 1947, a combined result of the larger number of men in the armed forces in the latter year and of the long-time trend toward smaller families. But this decline was not uniform among the various income groups. For example, if the 40 per cent of families with lowest incomes in 1947 are compared with the corresponding group in 1935-36, the average family size of the group is found to be 12 per cent lower in the latter year than in the former. For the third and fourth quintiles average family size was about 5 per cent lower in 1947 than in 1935-36 and for the top quintile several points higher. In other words, with expanded employment opportunities larger families with more potential earners were able to improve their relative position on the income scale. As a result the lower quintiles included a larger proportion of small families in 1947 than in the prewar period so that the actual shift in extent of equality was larger than the charts indicate (Table 6).

Lack of Adequate Data for Component Groups of Families

What we actually want to know about income size distribution over time is not so much what has happened to the distribution for the entire universe of families, but how various component groups of families, classified by characteristics other than income, have shared in increases or decreases in total national income. For example, was the apparent increase in income equality from 1935-36 to 1944 and 1945 true for

each major occupational group—for farm operators, nonfarm business entrepreneurs, independent professionals, and for different sectors of the wage and salary group? Were there changes in different directions for different groups of families in the postwar period which are concealed in the over-all figures? To what extent are changes in the distribution a reflection of shifts in the relative importance of the various groups? Putting the question differently, what major changes have occurred over time in the composition of the low-, middle-, and top-income groups with respect to such factors as per cent of newly-formed families versus older-aged ones, per cent dependent on social security payments, per cent living on farms, etc.?

Most of these questions cannot be answered on the basis of the data presently available from the small sample surveys. The statistics are too unreliable to make meaningful comparisons over time for many breakdowns of the population. For farm operators, particularly, some of the successive surveys show such marked differences in various characteristics of the income distribution that comparisons over time are not warranted. Nor are some of the results for nonfarm business and professional groups much better. This is not offered in criticism of the surveys but merely to indicate that such results may be expected from very small samples and that certain interesting types of analyses are therefore precluded. It should be pointed out in this connection that understatement of entrepreneurial income is not confined to the recent family surveys. Tabulations of the business schedules of federal individual income tax returns show a much greater understatement of net farm income on tax returns than can be explained by the exclusion from tax coverage of persons with gross incomes of less than \$500. Nonfarm business and professional income is also substantially understated on the returns.

It has often been commented upon that relatively little attention has been given to an analysis of the available data from the surveys for component family groups. Only part of the reason for this lies in the lack of an adequate conceptual and statistical basis for analyzing differences in the "real" incomes of such groups, farm and nonfarm families, families with varying numbers of children, etc. Part is simply the lack of consistent and reliable breakdowns of family income data from the small field surveys. Periodic larger surveys—one covering 1950 is now being planned by the Departments of Labor and Agriculture—should provide the necessary cross-classifications for such components of the population. The same survey will also furnish material on the expenditures, taxes, and savings of families at different income levels, statistics which are essential for evaluating the data on income distribution. At the same time, further improvements are called for in field survey

techniques, particularly with regard to the enumeration of farm operators and nonfarm business and professional families, and in techniques of adjusting the survey results on the basis of data from audited income tax returns and other sources. Such improvements may make it possible in the future to analyze income distributions for major component family groups which underlie and make more meaningful changes over time in the income totals.

THE INCOME DISTRIBUTION AS A MEASURE OF ECONOMIC WELFARE

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The income distributions currently available can be supposed to measure but one aspect of economic welfare: potential or actual command over economic goods. Equivalence even in the earnings of the recipient units does not mean equivalence in man-hours of work. The earnings may be the returns for a thirty- or a fifty-hour week and may be those of one person or three or more men, women, or children. Nor do the distributions show differences in the permanence of the incomes received or in the rights, priorities, or privileges concurrently acquired, rights with respect to tenure, seniority, old age or sickness benefits, and the like. The subject of this inquiry might be rephrased to read: What questions arise in appraising an income distribution as a measure of the beneficiaries' relative claim to or use of goods quite aside from any inadequacy in the sample design, the survey method or other techniques, or the adequacy of the distribution for other purposes?

Economic welfare so far as it can be measured by income has been defined as potential or realized command over economic goods, the services of persons and things. High economic welfare is thus identified with relative abundance of economic goods, whatever their character; low economic welfare with their lack. By this definition the income index for a nation might show a high level of economic welfare although a large part of the goods were those used in warfare, and for a family if they were largely medical services and supplies.

Equivalent command over goods and degree of equality therein may or may not mean equivalent welfare or degree of equality in some other sense. To determine this, attention must be extended to the state of the beneficiary, his satisfaction, health, happiness, personality, content with his world, or something else psychic or physical, or to the consumption pattern, the specific character of the goods used or possessed, or how this was determined. But although the relation between well-being in general or well-being in some specified respect and economic welfare as defined may be imprecise, partial, and uncertain, it cannot be overlooked that the interest in the income distribution as a measure of economic welfare arises primarily from an interest in welfare otherwise conceived. In our culture a relationship between welfare in one or many particulars and the possession or use of economic goods is generally assumed. Broad welfare judgments are made and welfare ques-

tions raised as soon as income distributions are viewed as measures of the command over goods of the persons represented.

Interest in the personal income distribution until recently derived almost entirely from interest in relative economic welfare. In recent years it has derived from a different source, its implications not as a measure of relative economic welfare but the functioning of the economy, the level of employment, production, and income. King preceded his estimate of the distribution of income among families with the statement, "Of all tests income is the best single criterion of economic welfare."¹ Those currently presenting their estimates from field studies or otherwise state that their primary purpose is to build up national estimates of consumer expenditures and savings and emphasize their high significance as diagnostic and prognostic items with respect to the state of the economy.

Roughly coincident with the widespread expression of the new interest has come increased knowledge of the distribution. When the interest in the distribution was relative economic welfare all investigators would have agreed with King that it was "impossible from the sources at hand to construct a technically accurate statistical answer to the questions about wealth and income concerning which the thinking public wants information."² To achieve the purposes of those latterly interested in the income distribution, a consumption study must parallel or have recently paralleled the income study. Those interested in the welfare aspects of income inequality at first gave all their attention to consumption, not income. There is a long history of such studies. Groups identified as "the poor" or others whose economic welfare was suspect were made the subject of investigation. Thus the consumption studies, as the income studies, may be roughly classified into the "early," in which the welfare interest was paramount, and the "recent," where the economic interest is primary.

Preliminary to discussion of the income distribution as a measure of economic welfare, the statement is often found that the distribution shows the impact of the economic process upon the individuals and families represented therein. This statement needs qualification. The money incomes shown are not solely what the market has currently awarded for participation in economic enterprise with or without subsidies, supports, protective or income-regulating devices. The distribution represents only in part rights to income that have been established by private contract currently or in the past. Increasingly public policy has been directed toward the alteration of the distribution from what it presumably would have been if all incomes were so determined.

¹ *Wealth and Income of the People of the United States* (1915), p. 217.

² *Op. cit.*, Preface.

Among the types of money income giving command over economic goods are what Dalton called "incomes from civil rights,"³ going to those whose claims are based upon status, their eligibility to receive defined by statute. These rights to money income were expressly created to supplement those otherwise derived or to ensure a money income to those who otherwise would have had none.

The increase in the number of persons receiving civil rights income might be supposed to have an equalizing effect upon the income distribution and the command over economic goods it formally represents. Viewed as transfer income, with the transfer from the upper levels to the lower, such would be the conclusion. But the outcome will depend upon the changes in family status that accompany the receipt of such incomes. The personal income distribution is a distribution of individuals independently domiciled or for other reason regarded as independent economic units and of groups of persons, usually related, with and without income. One of the purposes of giving the aged, the widowed, and the orphaned a statutory claim to money income was to make it possible for them to live separately and to remove the burden of their support from relatives. All who have studied the living arrangements of this group of income recipients agree that it has had this effect and that an increase in the stipend would increase the proportion so living. Thus the number of individuals separately domiciled and the number of families, especially those with heads sixty-five or over and of those with two members, increased. There was a redistribution of persons as well as of incomes which resulted in an augmentation not only of the total number of recipient units but of those at the lower end of the income distribution, rather than simply an augmentation of the incomes of families with such entitled members. From the reports of the Social Security Administration it would appear that in 1947 and 1948 about a fourth of the recipient units reported by the Bureau of the Census as having money income under \$1,000 (about 17 per cent of all) were those with income derived entirely from old age assistance, old age and survivors benefits, or aid to dependent children.

The personal income distribution in its usual form is therefore in part a product of the family status of the population, which is in turn a product of income and housing supply as well as tastes and preferences. A change of any magnitude in family status may have the apparent effect of increasing inequality in command over goods when the real effect is in the opposite direction. The distribution is affected by an upward movement in the school-leaving age and a downward in the marriage age, the former reducing the number of earners per family and total family incomes, the latter increasing the number of families

³ *Some Aspects of the Inequality of Incomes in Modern Communities* (1920), p. 25.

and reducing the number of earners per family. Offsetting the effect of these two population changes is the increase in the employment of married women, an equalizing factor so far as money incomes are concerned, since their rate of employment is negatively correlated with family income without their earnings.

Whatever has shaped the income distribution—market process, governmental action, or other forces—what may be its limitations as a measure of relative command over goods? The income concept, the components of income, the definition of recipient unit vary from one distribution to another. The decisions on these matters are in part made on the basis of expediency and in part, as they should be so far as possible, on the basis of the purpose the distribution is supposed to serve. Although the interest most recently and extensively expressed has been in the economic rather than in the welfare effects of the distribution, questions concerning the income concept that will best define that of which consumption or savings is a function parallel to great extent those concerning income as that which measures actual or potential command over goods by the use of that income. It is necessary, therefore, to recapitulate a familiar list of matters that must be taken into account in determining whether a given income distribution accurately measures the levels of consumption or savings attainable by the recipient units through the use of their income during the period in question. First, what deductions from or additions to the income given would make it a better measure?

Deductions are necessary if the nominal income is not the income disposable for consumption or savings. It is generally assumed that the incomes by which the recipient units are distributed are disposable in the sense that they can be used in their entirety without changing net worth of the recipients.⁴ The next question is whether allowance has been made for direct tax levies. The levy which by virtue of its character and coverage it is possible and appropriate to deduct from a nationwide distribution is the federal income tax. It should be deducted if its progressive character more than offsets the regressive character of direct levies not taken into account. It can be allowed for with approximate accuracy if incomes reported are those legally taxable and information is available concerning the character and composition of the recipient units. Within each income class are those consisting of one person and those consisting of five or more. The five or more may be adults, or one or two adults and children under eighteen. There may be one or many individual incomes subject to tax. The high- and low-

⁴ Since this is a cost accounting problem, questions arise as to what outlays are costs of securing the income, how much of certain costs is to be charged against current income, and kindred issues.

income classes, moreover, vary considerably in the composition of the recipient units. Recipient units of the same composition will vary in their allowable deductions but it is differences in their composition that will cause the greatest variation.

The federal tax on earnings up to \$3,000 in the "covered" employments raises some special questions. Income before deduction of this tax is not disposable in the sense that the recipient is free to use it for consumption or saving. Since payment of the tax is one of the conditions of eligibility to receive future income by himself or specified dependents, the taxable income before tax may be said to represent the attainable level of consumption or savings and an attained level of savings. The number of taxes of this character and of similar tax-like deductions from income is clearly increasing with a consequent change in the meaning of the taxable income as a measure of possible consumption or savings.

Having decided what must be deducted from money income to make it a more adequate measure of command over goods, it must be decided what should and can be added to it to achieve the same end. All recipient units have for their personal use and benefit some consumption items not a charge upon current money income. The magnitude of some of these items varies considerably among recipient units of the same money income and as between money income classes. The list of such items is a familiar one, including food, housing, and the like received as pay; farm products used by the farm family, the costs of which are covered by the farm enterprise; other home-produced commodities of which the only or major direct cost is unpaid family labor, the latter category merging into the larger one that includes all the diverse services rendered by those whose employment status, as the Census describes it, is housework in own home; that part of the services of an owned home and other consumer durables imputable to the equity therein during the period; and finally those commodities and services gratuitously available from private and public sources. There is an extensive literature which deals with the problems of estimating the money value of these items and of the effect upon the distribution of the failure or inability to add such a figure for one or all such items to the money incomes reported. The inequality shown in a distribution by money income may be reduced by the way these consumption items are distributed among the population. But even if the feat of valuation were successfully accomplished, the resultant income is not disposable as is money income among alternative consumption items and between consumption or savings. The inclusion of these items raises the consumption level attainable; the savings level only indirectly as they

free money income for this purpose.⁵ The consumption pattern—the actual content of the consumption level attained by those with income largely in money—will almost inevitably differ from that of those with an “equivalent” income but appreciably less money income. Only to a limited and varying extent do the consumption items of the latter represent choices made by the recipient unit during the period.

Food and housing are the items most frequently received as pay.⁶ The frequency of such additions to money income is decidedly higher at the lower levels as well as their value in proportion to money income. Here is a large proportion of the individuals most likely to be in occupations where pay in this form is customary. Food and housing are also the two major items that must be taken into account if the position of farm families in the distribution with respect to attainable consumption level is to be correctly shown. Almost all farm families report the use of home-grown food. About three-fourths report the use of farm-provided fuel and ice, the percentage being highest at the lower money income levels. The average value of such products among farm families at the bottom of the distribution exceeds and among at least the lowest eighth is usually at least as much as the money income. Almost all farm families have also either the use of an owned dwelling, the use of one as pay, or, if renters, the use of one whose cost has been included among the costs of farm operation.

Many nonfarm families in the smaller communities also have some home-grown food. More important, in all communities, at all income levels, are those occupying dwellings in which they have a varying equity as well as those who are renters. Here is an item of nonmoney income occurring most frequently at the high income levels and its value greatest there. If vacation homes owned were also taken into account, the addition to the real income of the high-income groups would be still greater. Home ownership, however, varies with the age of the family head as well as his income. A relatively high proportion of owners is therefore found at the bottom of the distribution, since here is found a high concentration of the older families, as well as those receiving public or private assistance whose money allowances are lowered because of home ownership.

Very little is known concerning the value of the distribution of

⁵ The reverse is true for that part of the money income of such economic enterprises as farming represented by increase in rotating inventories. The money value of this increase advances the level of saving; the consumption level only as it frees realized income for consumption purposes.

⁶ The reports on wartime spending and saving for 1941 and the first quarter of 1942 give data on the frequency of receipt in kind of food, housing, and certain other items, its source and value. See U. S. Bureau of Labor Statistics *Bulletin* 822 and U. S. Dept. of Agriculture, *Miscellaneous Publications* No. 520.

owned consumer durables other than dwellings.⁷ If all goods with a service-rendering life greater than the period of study were included, the addition to consumption level would not be unimportant. The difficulty of such an inventory and of calculating the imputed income from the equity currently represented is obvious. Although some of these durables are rented, ownership is more general than in the case of dwellings and there are not the variations in this respect among families of the same money income and among income classes. One can only speculate in regard to their value in relation to current income, since the equity will largely have been acquired through the use of past income, or their value in relation to the age of the family.

The total addition to real income through the services rendered by unpaid family labor, primarily women, is obviously of some magnitude. In recent years about thirty million able-bodied adults have at any one time been employing their energies only in this way. In addition, most of the six and a half million married women in the labor force who are coheads of households devote a good many hours per week to housework, and other family members perform services that have a market counterpart in varying smaller amounts. No feasible method has ever been suggested for placing a money value on these services. Measured in hours, the volume of this sort of service probably varies within each income group directly with the size of the household and inversely with the age of the children, time spent by family members in paid employment, and with degree of urbanization of the place of residence. The income classes are differently constituted in these respects. It can only be conjectured how money income and that alone affects the quantity of these unpaid services in farm and nonfarm communities. At some point in the distribution among families similarly constituted such services must begin to decline and the purchase of their market counterparts increase.

The final group of goods and services to be taken into account are those gratuitously available from private and public sources. Gifts of food, clothing, personal services, and the like between families need not concern us, since other than as a form of barter they are probably diminishing in importance. Organized giving to the needy and rendering of free services by private agencies exist, but the notable source of an expanding list of free or partially free goods and services is the public agency, local, state, or federal. For our purpose these may be roughly classified into (1) those available only for specified categories of the population or those within these groups or of any age or condition who

⁷ Aggregate depreciated investment in durable and semidurable goods was estimated by Cox and Breyer as 50.6 billion dollars, January 1, 1943. Reavis Cox, *The Economics of Installment Buying* (1948), p. 11.

meet a specified means test and (2) those that are freely available to all categories of the population without reference to ability to pay.

Food, housing, medical and hospital care are the goods most frequently provided gratuitously in whole or in part for those whose resources fall below a specified minimum. Grocery orders as a form of relief are a declining practice. If the food stamp plan had been extended to low-income families not on relief as was promoted at one time, there would have been a marked upswing in free goods of this character. The public housing program has moved and will move more and more urban families of low income into the group whose consumption level is higher than that attainable by their money income. Children are the category for whom free goods and services are most generously provided—a category with broadening age limits. The items so provided are also expanding from educational facilities and services to school books and supplies, midmorning milk, midday lunch, transportation, some dental and medical care. The recipient units in the distribution who benefit most are of course the families with children living in the communities where such items are most generously provided and among them those with the most children. In urban communities those benefiting most would be the tenth of the families with three or more children under eighteen, responsible for more than two-fifths of the children of that age, and in farm communities, the fourth of the families of such composition, responsible for almost three-fourths of the farm children. Over-all, the families benefiting most would be the one-seventh with three or more children, which include more than half of those under eighteen. Not all families with eligible children use the public facilities. If those they do use are not free or are only partially free, their attainable level of consumption or saving will fall below that of those with equivalent incomes who do use them.

The resemblance of these classes of free goods to the civil rights money income is clear. Both are largely transfer income and both arise in large measure from a public policy with the same welfare objectives. An ever present policy issue is whether income or income supplements shall be in cash or in kind. If in cash the results will show in the income distribution, while if in kind they will not.

There are also those free goods available to all categories of the population without reference to ability to pay. Here are those services the benefits of which to consumers cannot be differentiated from those to producers, those that would be provided whether there were any inequality in personal incomes or not, and a smaller group that are less likely to have been. It is arguable that the public provision for children and some other categories should be considered as of this character. This second group of free goods alters least the relative command over

goods from that represented by money income. They are more likely to be those that permit only socialized use rather than exclusive, individual, or family use. As an addition to per capita income they are in part benefits, like street cleaning, that are inescapable and in part merely rights which may be exercised if and when desired. The variety, quantity, and quality of such free goods are known to vary from community to community, increasing with the general income level.

Even if complete adjustments could be made and a distribution estimated on the basis of total income, there would remain the problem of differences in the markets to which recipient units have access, differences in goods available, their relative prices, and the general price level. These differences exist even in a market without trade barriers when the population is widely dispersed, lives in communities of all degrees of urbanization, and, it may be, with differing working and living habits. Widely separated communities differ other than in markets. Environmental conditions may make the attainment of a given level of well-being according to prevailing standards in both communities more or less difficult in one than in another and alter the resource cost. Techniques for dealing with the problem suggested have long been the concern of those interested in international comparisons and in comparing the attainable consumption levels of diversely situated farm communities and of the farm and nonfarm population.

Members of the same community with the same disposable income are assumed to be equivalent in economic welfare if the market is free and they have equal access to it. Their economic welfare is the same in the sense that each could choose what another did. No one would exchange (except in retrospect) the goods he chose for those of another; by his own standards he is at least as well off in terms of services of persons and things as if he had taken from the market what others with the same income did. By other tests neither he nor others would necessarily consider him as well off. The few whose tastes are quite deviate from those of the majority are not likely to find the goods on the market as much to their liking as will others. Some find the environment more beneficent or adverse than others; some will have special dietary, medical, or other needs that others do not have. But when market conditions for income recipients vary, those with the same income may not, even if they would, choose the goods used or possessed by others.

The difficulties in dealing with the problem presented by income recipients whose markets differ in price structure and goods available are threefold. One, is there something other than goods which would be expressed in a ratio of money costs in the two communities? If this be satisfaction from money outlay or other state of well-being, how

locate the point of equality in the two groups? Second, how would the same formula work if applied to individuals and families in the same community with the same range of choice and the same relative prices? Would the test of equality chosen if applied here run counter to the assumption that equal disposable income means equal economic welfare? Third, how make the formula yield one logically defensible ratio that meets other requirements of the solution, not two?

In a market that is not free, equivalent money incomes may not give recipients equal command over goods for other reasons. A frequent objective of governmental controls is to place command over goods on some other basis. Rationing with different allotments to different categories has this effect. A shortage even in a free market means that first-comers or those favored by dealers have a command over goods that others do not. Ceilings on the prices paid by some and none on the prices paid by others in the same market have the same effect. The control over rents that is a survival of the wartime price controls clearly operates to give one group of individuals and families in the communities affected tenure rights to dwellings at a lower price level than others are able to secure.⁸ Between 15 and 16 million rental units were under control on June 30, 1947, and rents on new construction were estimated to be 69 per cent higher than on comparable units under control.⁹

What is a temporary market situation for white individuals and families of the same community and income is one of long duration for Negro individuals and families. Especially with respect to housing, the latter buy in a restricted market that results in a higher price for equivalent accommodations. For other goods as well there is a kind of rationing, a permanent shortage, a long-run unsatisfied demand. The Negro population as a whole does not have the same range of choice as the white. Most Negro families, especially in urban communities, would move down from their position in the income distribution if their command over goods were accurately expressed.

Up to this point the question has been what deductions from and additions to money income and allowances for differences in purchasing power of the money income would have to be made before degree of equality in consumption or saving level attainable as among the recipient units in an income distribution could be accurately measured. The consuming or spending or allegedly income-pooling units are individuals or families. Now it must be noted that a distribution of such units does not measure the relative economic welfare of the population.

⁸ There are obviously many other aspects of this policy, some debatable, as its effect on rates of construction of rental housing, the space rationing under controls versus that with controls removed, and some nondebatable. The one relevant to this discussion would seem to be of the latter character as would be its effect upon enforced home purchase.

⁹ U. S. Office of the Housing Expediter, *Annual Report, 1947*.

defined as all members of the community. There is an inevitable inequality in the number of persons represented by the recipient units as well as a possible inequality in the income of the units. With perfect equality of income as among units there would be inequality among the persons comprising the units.

It is inaccurate to describe the maintenance of those not entitled to income by virtue of civil status or private contract as a form of consumption, a choice among alternatives of the individual recipients, or the status of that half of the population as recipients of gifts. Most of them are claimants by virtue of rights defined and maintained by law as well as by powerful social sanctions. These rights are based on family status—a defined legal or blood relationship between persons. The survival of this status system of determining claims and obligations beside a prevaillingly contract system creates a dichotomy often overlooked, although it has been observed that familism in some respects describes our society better than individualism and that the family operates for inequality in opposition to the forces making for equality.¹⁰ The income of the beneficiary units by virtue of family status as of those receiving it by civil status is transfer income;¹¹ it is an income largely in kind, the amount and character determined by the matriarchal, patriarchal, or other system by which a pooled income is allocated.

The census reports on the distribution of individuals and families by money income disclose in considerable detail the disparity in the size of the recipient units and in the age composition of those including two or more persons within each income class and the differences in these respects among the income classes.¹² They are of the sort that might be deduced from the definition of income and recipient unit. They result in a marked disparity in command over goods by the persons included in each income class and point to the necessity of examining the composition of each income class before taking income difference as a measure of the difference in economic welfare of their respective constituents.

About a third of the persons in the lowest tenth of the recipient units as reported in the census study are individuals whose incomes are presumably wholly at their own disposal but less than 1 per cent of the upper tenth. Likewise a third of the members in the lowest tenth of the families were in two-person families, but under a tenth of the members of the families in the upper tenth of the distribution. Over

¹⁰ Dalton, *op. cit.*, p. 22.

¹¹ Certain types of transfer income in the form of money may be described as changing the beneficiary's right to receive from that based on family status to that based on civil status.

¹² See U. S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 5.

half of the members of these upper tenth families were in families of five or more, but slightly less than a third of the lower tenth. The large families relatively so frequent at the upper-income levels to a far greater extent than at the lower were made up of adults. The large families at the low levels were parents or a parent with children under eighteen. A larger percentage of the children were in families with three or more at the low level than at the high and the ratio of children to adults among all family members was higher at the lower than at the higher levels.

The larger families in the lower tenth of the family distribution were mainly those living on farms. Less than a fifth of all the families as estimated by the census were rural farm, but two-fifths of those in the lower tenth of the money income distribution were rural farm and two-thirds of those with five or more members were rural farm. Disparity, however, of the character indicated inevitably is found in the size and composition of the recipient units at all income levels in all communities as well as differences between income classes, especially at the ends of the distribution.

From the data given in the census report on the frequency of recipient units of each size in each income class, an approximate distribution of the population on the basis of money income per person can easily be made. Roughly the lowest tenth of the population appeared to have had in 1947 an income of under \$250 per person, and the upper tenth, \$1,965 and over. The first quartile was about \$450, the second about \$800, and the third about \$1,250. Such a distribution changes greatly the composition of the successive income classes. Less than a fifth of the lowest tenth of the population arrayed on the basis of income per person were individuals or members of two-person families, and almost three-fifths were members of families with five or more family members, one-third members of those with seven or more, a marked contrast to the composition of the population in the lowest tenth of the recipient units or in the lowest tenth of the families. In the upper tenth of the population on the basis of income per person, about half are individuals or members of two-person families and roughly a seventh members of families with five or more members.

A distribution of the population on the basis of money income per person as a measure of relative command over goods has all the limitations previously referred to. It has others inherent in the calculation of income per person by dividing income available for a group by the number composing it. Such a division would rarely if ever represent correctly the relative command over goods of these persons. If a child's share is less than an adult's, there is obviously a flaw in such a distribution as a measure of relative economic welfare. The distribution

further misrepresents relative consumption level attainable even as between members of families of the same age composition but of different size. The reason is akin to the situation that arises when the units in a distribution buy in markets with differing price structures. The family as a way of living has certain economies. Certain costs are prime costs. The value of the housing or the radio or the newspaper enjoyed by each member of a family of four is not half the value of that enjoyed by each member of a family of two with the same income. This is but another way of saying that to attain the same consumption level the family of four does not need twice the income of a family of two.

The conclusion then is that a distribution of individuals and families by the amount of their money income or even by money income with certain deductions and additions is an imperfect measure of the economic welfare of the population. It is so imperfect that in the public interest the distributions now appearing at frequent intervals and being given wide publicity should be labeled "dangerous" or "subject to misinterpretation." Even if imperfect, are these estimates the best possible measure of relative economic welfare? To decide one must know precisely what those who desire such a measure wish to find out. In most cases the distributions are used as the basis of welfare judgments of various kinds, and policy issues are often at stake. The interest may be in changes in relative economic welfare over time. A change in the degree of equality of the incomes of individuals and families has, it should be noted, both a dubious welfare and economic meaning. The equalizing effects of economic forces are shown by changes in the equality of the contract incomes of individuals, especially in those of men from the usual school-leaving age to retirement. The interest may lie not in long-run trend with respect to degree of equality but in the present state of the population. A subcommittee of the Joint Committee on the Economic Report is investigating "low-income families." Will they best identify the subject of their concern through a distribution of individuals and families by money income or even total income so far as that can be secured? Or, should they follow the model of the British studies of poverty by Booth, Rowntree, Bowley, and Ford? Should the problem be redefined as that of determining whether the income of each married couple or other recipient is sufficient to provide a defined level of consumption and savings for themselves and their presumptive dependents? It is true that this would require both a definition of the level and of presumptive dependents but since both are involved in the welfare judgments based upon the personal income distributions, may it not be desirable to place them on the agenda for specific consideration and analysis? In any event, should not special attention be given to the composition of the income

classes at the top and bottom of the distribution—those where the composition varies considerably from that of the population in general?

Finally, the query might be made whether for purposes of showing relative economic welfare of the population a distribution of individuals and families by consumption level attained would be preferable to a distribution by current income. It was Engel's thesis that consumption is the measure of the welfare of individuals, families, and nations, and this belief was behind his drive for statistical data and his attempts to derive from them a welfare index. If consumption level attained means the total monetary value of consumption goods used or possessed, it would vary from the current income by the amount of saving and dissaving, a variation related to the composition and total economic situation of the recipient units as well as to the complex of motives that lead to spending or to saving or dissaving. Within each income class the relation between consumption level and the current income will therefore vary as the units included vary in these respects. The over-all equality in consumption levels will be greater than the equality in incomes.

Such a measurement of consumption level implies that the food or housing level attained is the same if the monetary value is the same whether there is one or several consumers or whether markets accessible are the same. The experiments of Hagood and others with consumption level indexes to measure what the former describes as the degree of attainment by families or groups of families of a consumption pattern "which through its universality comes closest to typifying attained and attainable patterns"¹³ by-pass these difficulties. Degree of attainment would be the product of market situation, family composition, non-money as well as money income.¹⁴ There are obviously assumptions that need verification behind this method of measuring levels attained as well as difficult methodological problems especially if farm and non-farm families are to be placed on the same scale. The fact remains, however, that when the problem is the relative economic welfare of the population with public policies at stake, there is a variety of approaches to be explored.

¹³ Margaret J. Hagood and Louis J. Ducoff, "What Level of Living Indexes Measure," *American Sociological Review*, February, 1944, p. 80.

¹⁴ It might also be the product of a unique set of values.

ALTERNATIVE TECHNIQUES FOR PROMOTING EQUALITY IN A CAPITALIST SOCIETY

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This paper takes as its starting point the postulate that in most countries today a diminution of the current inequality of income distribution is something that should be welcomed. There are important differences of opinion about the reasons for regarding inequality as excessive when it gets beyond a certain point, about the speed at which it is desirable that inequality should diminish, and about the earnestness with which one should insist upon the significance of the obvious distinction between diminishing inequality and establishing equality. An examination of these differences is, however, for the most part not necessary for the purposes of the present discussion, which is designed primarily to bring out the significance of the contrast between the two main approaches commonly used in elaborating techniques for the diminution of inequality. For purposes of practical action, indeed, it will be suggested, the two approaches need not be regarded as mutually exclusive. There is much to be said for working along both lines simultaneously, and if we seriously wish to diminish inequality, this is what we shall most likely decide to do. Nevertheless, the decision to place the greater emphasis on one or other of these approaches is a matter of considerable practical importance and is likely, moreover, to reflect still more profound differences in economic and social philosophy.

The causes which have produced the current pattern of income distribution are complex. Their general character is fairly well known to economists and it is not necessary to recapitulate them in detail here.¹ Broadly speaking, they may be conveniently grouped in two broad classes: those which explain the differences in earnings arising from the performance of different kinds of work and those which explain the differences in the amount of property owned by different individuals. The pattern of inequality which is generally to be observed has never been rigid and unalterable. Inequality has been greater or less at certain times than at others, and in certain countries than in others. There has, especially in this century, been a powerful movement in favor of specific steps to establish a greater degree of equality. Even without any deliberate action, it is only to be expected that in the course of time the relative strength of the influences which tend to produce inequality should alter, and economic policy decisions, even when they are mo-

¹ Cf. Edwin Cannan, *Wealth* (1928), Chs. XI-XII, and *A Review of Economic Theory* (1929), Chs. XII-XIII.

tivated by considerations in which hostility to inequality plays little or no part, often have as an incidental by-product some important effects upon income distribution.

The decision whether or not to support any particular measure for diminishing inequality cannot of course be made exclusively on the basis of one's judgment of its probable efficacy for that purpose alone. Other effects it is certain to have, for example, upon the efficiency of production, and these may be of such overwhelming importance as to be quite decisive in determining our view. In the first instance, however, we may ignore these effects, and concentrate our attention upon the distinction between the two divergent points of view which have in fact determined the character of most recent efforts to diminish inequality.

If our preference favors what I shall later call the "radical" approach, we should begin by examining the causes of inequality, and, having determined which of them can be most easily removed or weakened, we should look about for suitable instruments for this purpose. The application of these instruments might then be expected in the course of time to facilitate the emergence from the "normal" processes of income distribution of a new and less unequal pattern of distribution.

The effects produced in the pattern of income distribution by changes which weaken some of the causes of inequality are not likely to be seen at once. Those who are impatient for quick results have therefore often naturally enough preferred a more direct attack upon the income structure as it exists at the time; observing the inequalities which appear as the current "normal" processes of distribution allocate their shares to each unit in the economy, they then attempt to remedy inequality by compulsory direct transfers from those to whom the "normal" processes allocate more than the average to those who are receiving less.

Direct transfers, by way of private charity, from those who are well off to those who are badly off, have long been practiced in economies at every stage of development and of every conceivable kind of structure and have found respectable support in appeals to both religious and ethical sentiment. There is no reason to suppose that they will ever cease. Their economic significance has, however, usually been slight and is likely to remain so. In medieval Europe, the practice of almsgiving was held in high regard, though the benefits which it was believed would accrue for the soul of the generous giver were often thought to be no less important than the more material relief afforded to the recipient. St. Paul had, however, expressed concern over the unfortunate results of indiscriminating almsgiving and had gone so far as to enunciate the rather strict principle that "if any would not work, neither let him eat."² If uninstructed benevolence encourages, as it may easily do, a quasi-

² *Second Thessalonians*, iii, 10.

commercial attitude toward the receipt of alms, some people may be induced to make a business of the cultivation of potential donors while at the same time much privation is left unrelieved. We do not now normally regard the spectacle of numerous beggars on public thoroughfares as compatible with respectable standards of economic or social development.

In recent years the organized redistribution of income by the state through the channels of taxation and public expenditure has been much more important than private charity. Sometimes the redistribution has been fairly direct; money has been collected from one set of people and paid out to another; e.g., old age pensioners. Sometimes it has been more indirect, the obligation to pay and the right to receive benefits financed by the state being formally shared by everybody, but both being so arranged that, in proportion to their means, the rich pay more than the poor, while at the same time they are also likely to make less use of the facilities and enjoyments which are financed by the state out of taxation.

Redistribution by such methods accepts, at least tacitly, the existing pattern of gross income distribution as a datum not to be questioned. The "normal" economic processes from which emerges the stream of goods and services which constitute the real national income are permitted at the same time to allocate a certain fraction of the whole to each of the individual members of the economy. This original distribution is then corrected after the event by lopping off part of the gross income allocated to certain individuals and handing it over to others—and usually to those whose original allocation has been less than the average. This direct redistribution will have some effects upon production, which in turn will produce some incidental effects upon the pattern of gross distribution. By its very nature, however, redistribution along these lines must be endlessly repeated, if it is to produce the desired results.

This method of redistribution now has a lengthy and respectable history, and we are unlikely ever entirely to dispense with its use. Redistribution of income by means of taxation and social services has become a commonplace, to which in principle few will seriously object. The controversies which still rage in this field are usually on questions of degree. There are still many countries where there is a strong case for pressing for more intensive use of this technique. Experience has shown that most economies can stand a great deal more of it than many supposed when the first modest experiments were made. There is no doubt always some risk that it may be pushed too far, and in some countries the view has recently been expressed—and not only by those who in any event are lukewarm in their appreciation of measures of this kind—

that the limits of redistribution by taxation have already been reached. The discouraging effects of high taxation upon production and in particular its effects upon willingness to undertake the risks associated with the more novel types of investment and work which in a progressive economy ought to be constantly expanded, may be so serious as to justify a cautious restraint in our efforts to correct inequality by these means. It is indeed unfortunate that the critics of high taxation have so often in the past overplayed their hand. Because their warnings of impending disaster have so frequently been proved by events to be without justification, they run the risk of being neglected or brushed aside even when they are right. Fortunately for the human race, it often displays a surprising resilience in the face of unexpected shocks, but if resilience is to be maintained, the shocks should not be too numerous or severe. The hard-boiled businessman who for the greater part of his life has been accustomed to paying income tax at a low rate, say x per cent of his income, may be indignant and resentful when with little or no notice the rate is doubled. His son, who has never known anything better, is likely to be less disturbed by the $2x$ per cent, and his record of initiative and venturesomeness may be just as good as that of his father. Nevertheless, even for his son there is likely to be a limit which it would be imprudent to ignore.

Moderation in all things is usually a sound working principle. As the average level of taxation, whether imposed as an instrument of redistribution or for other purposes, rises everywhere, the problem of maintaining effective incentives for economic activity may become acute, and the risk is increased that the limit may be passed beyond which it is unsafe to raise the level further. The limit is probably flexible, but it is not indefinitely extensible. The judgment to be pronounced on this issue in particular countries today must depend upon a more elaborate analysis of local conditions which must be left to those who in each case have the requisite foundation of factual knowledge. The view that the limit has already been reached beyond which further income redistribution by way of taxation can safely be pressed without incurring losses in other directions may now possibly be justified in a significant number of countries, and if this is so, the case for considering alternative methods of dealing with inequality is greatly strengthened.

It is in any event a little odd that so many people should have such a marked preference for the endless repetition of all the elaborate motions needed for the continuous large-scale transfer of income from the relatively wealthy to the relatively poor—motions which by their very nature can never produce permanent results—and should show such little interest in the application of other techniques the results of which would be much more permanent. The alternative approach to the problem

which was briefly indicated above is genuinely "radical" in the true sense of that word: it seeks to go to the root of the matter and is not content with the always delayed correction of inequalities which will continually re-emerge so long as its basic causes are neglected. The preference for the superficially more direct methods appears still more odd in face of the fact that the "radical" approach is also likely to have beneficial effects upon production. An anti-inequality policy based upon this approach would work simultaneously along two lines. It would seek to alter permanently the relative scarcities of different types of skill and service, which are the basis of many of the more striking inequalities in income derived from work, and it would also remodel the institutional framework within which inheritance—one of the most potent causes of inequality of incomes derived from the ownership of property—exerts its powerful influence.

If we seek to explain specific cases of inequality between the remunerations paid for different kinds of work, we usually find it necessary to say a good deal about certain influences which appear to be peculiar to the case in hand: the strength of trade union organization, for example, or the influence of traditions created by the past history of wage movements. None of these influences can safely be ignored in any realistic study of income distribution. It is, however, easy to exaggerate their importance. As a rule they are factors of the second order of importance whose influence is superimposed upon a pattern of income distribution which, broadly speaking, reflects the current conditions of supply and demand for each type of labor performed within the economy. When one kind of work is paid for at higher rates than another, it may usually be assumed that those who are competent and permitted to perform the better paid work are, relatively to the demand for their services, scarcer than those who are competent to perform work which is less remunerative.

So far from justifying the conclusion that the pattern of distribution is inexorably fixed and that we can do nothing about it, reflection upon the implications of this doctrine should forcibly direct our attention to the possibility of remolding the pattern by changing the basic structure of supply and demand upon which ultimately it rests. Social pressures and prejudices are in every society important—and sometimes overwhelmingly important—in limiting the range of choice of occupation open to certain sections of the community. These are, however, always subject to change, whether deliberate or unintentional, and whether we like it or not, some changes are always going on. Particularly on the side of supply, the institutional factors which greatly influence, even where they do not determine, the allocation of labor are capable of much more deliberate modification than in most countries they have yet re-

ceived. There can be little doubt that the most important influences determining, for example, the disparities between the normal earnings of men and women are the various obstacles, social and otherwise, which impede the entry of women into certain occupations. The institutional factors of which this is an obvious illustration are usually closely connected with educational practices, and the most obvious modifications on the supply side—which do not, however, necessarily exhaust all the possibilities—are in the field of educational policy.

There are no doubt many factors which may conveniently be grouped under the heading of "natural forces" which at any time limit the number of people with the intrinsic qualities needed for the efficient performance of the more highly paid types of work, and thus create "natural" scarcities, from which in the ordinary course definite and important inequalities would emerge in the pattern of income distribution. But upon the effects of these "natural" scarcities there are superimposed the effects of other scarcities, which are not at all natural, arising from the expense and other difficulties involved in the acquisition of many types of skill. The removal of these difficulties, whether in whole or in part, might confidently be expected to have far-reaching and permanent effects upon income distribution.

The wide extension of educational opportunity during recent decades was for the most part not due to any respect for those considerations. Not all of those who were active in pressing for reforms of this kind were unaware of their profound significance for income distribution.³ For the most part, however, the consequences which have in fact followed in this field were not deliberately intended. To many people the fairly close connection which can be traced between variations in the "normal" wage differentials between skilled and unskilled labor and variations in current average standards of education in different countries comes as a surprise, and, what is more important for purposes of practical policy, when the consequences in this field of further extensions of educational opportunity become evident, they often provoke vigorous resistance from people who are unwilling to face the adjustments in their own mode of life which such consequences demand.

There are, of course, numerous individual exceptions, but the general rule is that the ranks of unskilled labor are recruited from the less educated members of the community and some more or less elaborate educational foundations are usually necessary to acquire even an ordinary artisan's standard of skill, and much more any of the skills de-

³ Cf. P. H. Wicksteed, *Common Sense of Political Economy* (Vol. ii, p. 701): "We, the privileged, must remember that if we are in earnest we are endeavouring to curtail or to abolish privilege. We are throwing open the preserves, and in proportion as we succeed in our endeavours, we and our children will have to take chances in a world that has no special care for us."

manded in still more highly paid occupations. If a change in educational policy makes it easier to gain the qualifications which command higher pay and thus to avoid entry into the ranks of unskilled labor, we may expect the wages of unskilled labor relative to the remunerations paid for other types of work to rise, just as the wages of carpenters or the incomes of medical men would tend to rise if it were made more difficult to become a carpenter or to enter the medical profession. Obviously and perhaps somewhat paradoxically the benefits to be derived in this context from the liberalization of educational policy would often accrue for the most part to those whose level of education remained unchanged, for it would be they who would enjoy the advantages to be derived from increasing scarcity. The rest of the community would, however, have no legitimate ground for complaint on this score, for in a reasonably well-ordered economy their real income standards would also be rising, though not so rapidly as the standards of those who were left in the lower-income strata.

If the extension of educational opportunity is slight, its effects upon income inequalities will be correspondingly limited. In practice they may indeed be almost imperceptible, or at least concealed by the more far-reaching consequences of the numerous other influences which will at the same time be impinging upon the supply of and demand for various types of labor, or held in check by the other institutional and social factors which are constantly causing differences between the real income structure and the income structure which would be created if nothing but relative scarcities were allowed to determine income distribution. If, however, the extension is large, the limitations which custom or social prejudice might otherwise impose will eventually be broken down; after a gradual adjustment of the shape of the income distribution pattern to the new supply-and-demand situation created by changes in educational policy, it will be seen that a closer approximation to equality has been attained.

In any event the immediate effects upon income inequality of even drastic changes in educational practice will seldom be very substantial. For the most part they can affect only new entrants into the labor market; and the number of new entrants into any one occupation at any given time will usually be small in relation to the total supply. Changes in educational policy will increase or diminish their number only slowly and gradually, so that the effects of the consequential changes in degrees of scarcity will be comparable with the effects upon the price of houses or upon the value of gold of any influence which tended to alter the volume of new house building or the output of newly mined gold. At least a generation must elapse before the full effects of any radical educational reform can be felt. And it is of course necessary that the

changes in relative values which a more liberal educational policy should produce shall not be impeded by the successful efforts of those already at work in the more highly remunerated occupations to maintain artificial scarcities by setting up unnecessary barriers to the employment of others.

The whole of this analysis is extremely elementary, in every sense of that term. It is now more than sixty years since Marshall pointed out that "the normal earnings of a carpenter and a surveyor might be brought much nearer together than they are, by even so slight and easy improvement on our present social arrangements as the extending to all persons of adequate natural ability the opportunity of receiving the training required for the higher ranks of industry."⁴ To this, indeed, Marshall added, "but we have to take things as they are." On the whole, however, we have been increasingly reluctant just to take things as they are, and though there are still few countries where it can yet seriously be claimed that "all persons of adequate ability" have been given "the opportunity of receiving the training required for the higher ranks of industry," social responsibility for the widespread extension of education has in nearly every part of the world been admitted now for a period sufficiently long to make possible a test of the hypothesis that this "slight and easy improvement on our social arrangements" would influence the distribution of income.

Surprisingly little work has so far been done in this field, though the inadequacy and intractability of the available statistical material are a partial explanation of the gap. It was, however, possible before the war to show that the ratio of skilled to unskilled wages tended to fall, as our hypothesis would lead us to expect, as one moved from countries where education was but little developed to countries with comparatively advanced educational systems,⁵ and though I am not aware of any more recent statistical analysis of more current data, it would be surprising if the situation were not much the same today. The correlation is far from exact, and the examination of particular countries where the ratio is either higher or lower than our hypothesis would suggest throws some useful light on other factors which affect income distribution. By and large, however, the correspondence between hypothesis and facts is sufficiently striking to justify us in regarding this as a striking illustration of the way in which, while still adhering closely to liberal economic principles in the strictest sense, changes in the basic institutions of society might be consciously used to reshape the pattern of income distribution.

⁴ *Memorials of Alfred Marshall* (1925), p. 214.

⁵ "Education and Relative Wage Rates," *International Labor Review*, 1932; *Bulletin of International News*, June 27, 1942, pp. 563-564.

It would be very useful at the present time to have a statistical analysis of the effects of alternative educational policies upon income distribution much more detailed and careful than the rough calculations mentioned above. When for most people education had to start from very low levels and those who were eager to extend it had little interest in or knowledge of its potential far-reaching effects upon income distribution, it was almost inevitably developed in a somewhat indiscriminating way with little regard to its effects upon the relative scarcities of specific types of labor. There can be little doubt that in the Middle Ages the mere ability to read and write conferred upon the "clerk" not only privileges in courts of law but also economic advantages which have now practically disappeared everywhere where elementary education has reduced illiteracy to negligible proportions. It was argued in England before the war that while "the charitable endowments of universities and upper-class schools have had an important influence in reducing the remuneration and cheapening the products of the better paid employments," the systematic provision of primary education has "rather resulted in diminishing the remuneration and cheapening the products of the class of labor which requires a smattering of letters, but is scarcely above, if it is at all above, the average,"⁸ and superficial observation seems to confirm the view that routine clerical work, which demands little more than the ability to read and write, is now often economically no more advantageous for those who perform it than any other kind of work which would traditionally be described as unskilled. These are no doubt important considerations which must be borne in mind in any historical interpretation of the educational policies of the last century. For those who are concerned with income distribution in the future, they merely mean that we still have a long way to go before exhausting the possible effects, within the framework of a strictly liberal economy, of basic reforms in the economy's institutions.

Basic reforms of this kind seem to be preferable as instruments for diminishing inequality, because their results are more likely to be permanent. But even if we had no concern at all with inequality, and were interested exclusively in expanding the volume of production, the same reforms would necessarily occupy an important place in our program. In particular they would make more readily available adequate supplies of key types of labor the scarcity of which often slows down the normal course of economic progress, and this should be a point of special interest to those for whom employment policy is the dominating concern. The risk that the maintenance of a high general level of effective demand may produce inconvenient inflationary pressures should be perceptibly diminished by an educational policy which widens some of the

⁸ E. Cannan, *Wealth*, pp. 209-210.

bottlenecks in the customary labor supply. If our efforts to correct income inequality start from this point, it is unlikely, therefore, that at any time we shall feel it necessary to restrain them lest they should impair the progress of production. It is likely rather that the educational reforms most effective for expanding the volume of production will also be the most satisfactory from the standpoint of distribution.

The inequalities of income which result from inequalities in the distribution of property are, however, often much more important than those which might be corrected by changing the relative scarcities of the different kinds of labor service to which at present markedly different rates of remuneration are usually attached. Here the institution of inheritance stands out most clearly as something immediately susceptible to treatment. "The institution of inheritance of property has, in every age and state where it has occurred, been a prime factor in maintaining a continuity of socially unwarranted power as well as an indispensable condition of the preservation of caste in its varied manifestations."⁷ By means of inheritance, old inequalities are perpetuated and new inequalities injected into the situation. The institution of inheritance has itself varied widely both from country to country and from time to time, and another field of investigation which has not yet by any means been fully explored is the effect of these variations upon the pattern of income distribution. Even when the most careful precautions are taken, it is indeed usually difficult to maintain intact indefinitely all the privileges and advantages associated with inheritance in individual cases, but even after taking proper account of fluctuations in individual fortunes, the effects of inheritance upon income distribution over a long period of time might be expected to be cumulative. In general, and neglecting individual cases, there is no tendency for inequalities based on these foundations to disintegrate with the passage of time, and the inheritance taxes which were imposed in many countries before the war seem to have done little more than limit to some slight extent the cumulative general effects of inheritance.

This is not a convenient place in which to examine in detail the complicated and difficult practical problems which arise in any attempt to reform the institution of inheritance. The maintenance of an unlimited right of inheritance is indeed a comparatively modern phenomenon, and it has been subjected to much criticism upon a wide variety of grounds. There may be legitimate differences of opinion about some of the details of any program such as that outlined by Professor Frank D. Graham in his *Social Goals and Economic Institutions*,⁸ but if equality is to be promoted within a capitalist society, further and more drastic changes

⁷ Frank D. Graham, *Social Goals and Economic Institutions*, p. 134.

⁸ Especially pages 144-145.

in current inheritance rights will certainly have to be made.

In principle the contrast between the two methods of approach which we have outlined for the correction of excessive inequality is obvious enough. In practice the dividing line is less clear. A "radical" approach to the problem of inheritance will certainly rely heavily upon the instruments of taxation, and education is reasonably regarded as one of the most important of the social services to be financed by taxation. Nevertheless, the distinction between measures which attempt to modify the basic structure of income distribution and measures which tacitly accept that basis and attempt merely to modify its consequences remains valid. In recent years the emphasis has tended to fall more and more upon policies of the latter type, and the process of collecting taxes and redistributing their proceeds has become immensely more complex than it used to be. Increasing resort has also been made to subsidies of various kinds, limitations of prices, and other "direct" devices, until the simple picture of redistribution by means of taxes and social services may seem to be quite inadequate. These complexities do not, however, fundamentally affect the contrast—a contrast which has not unfairly been compared to that between poulticing a sore and treating the disease from which it springs. There are obvious risks in any imputation of motives, but it may nevertheless be profitable to speculate a little on the circumstances which may be supposed to influence the minds of those who still prefer the superficially more direct but fundamentally ineffective approach to the problem of excessive inequality.

The first and no doubt the most obvious reason for neglecting the more "radical" approach is the impatience which is naturally felt with proposals whose full effects will certainly not be seen until after the lapse of a considerable period of time. If we are eager to do something quickly, we may easily feel that we are being fobbed off with academic irrelevancies when we are asked to apply our minds to the economic consequences of a wider extension of educational opportunity, the immediate impact of which upon income distribution may indeed be almost negligible. This is natural enough, but experience has often shown that eagerness to produce quick results may be the surest way of ensuring that the long-run results will be rather small and disappointing. In many modern economies the extent to which income is being constantly redistributed by taxation is already much wider than anyone a generation ago would have thought conceivable. The really astonishing thing about the efforts so far made in this direction is, however, the slightness of their permanent effects upon the general shape of the income pyramid. It is not unreasonable to suppose that, if the same energy and ingenuity which have been devoted to elaborating direct methods of income distribution had been directed to exploring and applying the

possibilities of Marshall's "slight and easy improvement on our present social arrangements," the shape of the income pyramid would now have been quite different.

Another important factor in the comparative neglect of the "radical" approach is probably to be found in the disfavor into which "automatic" mechanisms have fallen as instruments of economic policy. Automatic mechanisms are no doubt often imperfect, and on occasion may completely fail to produce their desired effect. But the qualifications which for this reason must be attached to approval of them are sometimes pushed so far as to imply that, even if there are good grounds for expecting favorable results from automatic mechanisms, it would be better to attempt to reach the desired end by more direct, and usually administratively much more elaborate, means. Sometimes it might almost be thought that some of the organizers of direct redistribution anticipate a keener satisfaction if they can contemplate the visible contraction of the large incomes of wealthy taxpayers than they would if by more "radical" action the original income pattern were to be reformed and the necessity for subsequent transfers by taxation were thus reduced to modest proportions. The results of redistribution by direct administrative means also present an appearance of precision which though often spurious is nevertheless congenial to some of our current habits of thinking. One can even sometimes detect in the preference for income redistribution by these more direct methods curious affinities with the old-fashioned middle-class prejudices which disliked wage increases on the ground that the working classes did not know how to spend their money and would probably squander any increase the disposal of which was left to their own discretion.

Greater emphasis upon the "radical" approach to the problem of inequality means that greater trust will be placed in the operations of the price mechanism in the labor market. This, however, by no means implies an attitude of passivity. It requires rather that we should first take vigorous steps to modify the conditions which determine the supply of and demand for different kinds of labor; as a result of these modifications we may then confidently expect to see a less unequal income distribution pattern emerge. The defects of the price mechanism are well known and there is probably no field in which its results have been more imperfect than in determining the price of labor. These imperfections are unlikely to disappear if the current institutional practices which to a large extent determine the allocation of the labor supply are left untouched. Contempt for the price mechanism here may, therefore, have the unexpected consequence of preserving, with some superficial modifications, a traditional order of magnitude for labor incomes for many parts of which there may even now be little rational justification.

The doctrine that the techniques of redistribution which conform most closely to the principles of a competitive economy are also the most likely to produce far-reaching and permanent results should not occasion any surprise. For so far in this field these principles have been applied only in the most hesitating manner and with all kinds of inhibitions and restraints imposed by extraneous institutional factors. Their courageous and systematic application would in the course of time result in something not far short of a complete transformation of most modern economies.

DISCUSSION

ABRAM BERGSON: I have only a few very brief comments to make on the interesting papers that have been read.

First, with regard to Professor Kyrk's paper. As I understand it, Professor Kyrk is chiefly concerned to point out the divergences that exist between inequality in money incomes and inequality in economic welfare as measured by command over goods. The point I have in mind can readily be brought out if attention is called to an interesting feature of her analysis: in her scheme account is taken of the effects of progressive income taxes but not of regressive sales taxes; of free goods but not of subsidies. I do not wish to question the validity of Professor Kyrk's procedure; I think it is obvious that she is focusing on an interesting and important concept of inequality and, it would seem, one indicated by conventional thinking on this subject. But in view of the aspects just mentioned, am I not right in thinking that exclusive preoccupation with inequality in this sense might lead to a rather one-sided view of what is really of concern to us here. I wonder accordingly whether it would not be advantageous for the purposes in hand to take cognizance at the same time of another kind of inequality; namely, to use a phrase paralleling hers, inequality in command over resources. As I conceive it, this second kind of inequality would diverge from the first as a result of direct taxes and subsidies and also (and the logic of this will be evident) certain other factors, particularly monopoly profits and exploitation.

To put the matter in somewhat different terms, what is in question here seems essentially to be a valuation problem—a problem of how to value, for purposes of measuring inequality, the different commodities entering into "real" income. Professor Kyrk in effect is following the procedure of valuing the different commodities in accord with their market prices or, assuming a relatively effective market, their relative utilities. All I am suggesting is that from some points of view it might be of interest also to value them in accord with their "real" cost.

Dr. Fisher refers in his paper to the large question of the effect of taxation and other measures for the equalization of income or incentives. I must confess that I am not fully abreast of the recent developments on this subject, and it is accordingly with some hesitation that I venture to comment at all on it here. Perhaps, however, I am not the only one who has been troubled by a recurring notion in discussions of this subject; namely, that there is some limit beyond which we cannot safely go in such equalization measures. I myself do not question that the equalization measures have an effect on incentives, and possibly an important effect. What concerns me, however, is simply whether it is conceptually meaningful to speak of a limit in this connection and, if so, in just what sense. I am aware, of course, that the limit is usually spoken of as Professor Fisher speaks of it here as a flexible one and perhaps what is involved is only a verbal issue. But still I wonder whether from various points of view this is not a matter deserving clarification. Perhaps Dr. Fisher will care to comment further on it.

Perhaps it is in order for me to insert here an observation of Dr. Fabricant's

bearing on Dr. Fisher's analysis, particularly the distinction between the two techniques for promoting equality under capitalism. While in principle this distinction seems an interesting one, it must be evident that in practice the two methods he distinguishes have been closely interrelated, and one wonders if Dr. Fisher has given sufficient attention to the problems that might be encountered if an attempt were made in the future to divorce one from the other. How, for example, is a wide extension of education to be financed if the progressive income tax is ruled out?

Without intending any criticism, perhaps it is permissible to express my regret that none of the speakers has seen fit to explore in any detail the basic value postulate that underlies this panel: the assumption that increased equality of incomes, other things being equal, promotes social welfare. I for one am not inclined to question this assumption, but I hardly need remind this audience that the conventional rationale found for it and for welfare conclusions generally in economic literature is at this stage rather controversial. My own feeling is that a thoroughgoing review of this aspect is already overdue. Perhaps this will be considered a suitable subject for discussion at some future convention.

TAX STRUCTURE AND PRIVATE ENTERPRISE

CAPITAL GAINS AND THE INCOME TAX

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The wide variety and still changing tax treatment of capital gains and losses in this and other countries clearly demonstrates that no single policy has been universally accepted. The proper treatment remains a problem everywhere because it involves various unresolved conflicts—in and between concepts of income, equitable considerations, revenue goals, administrative requirements, and the desire to avoid harmful effects upon the markets for capital assets and upon investment incentives.

In sharp contrast to the exclusion of capital gains from taxable income in Great Britain, the United States taxed them in full as ordinary income at the beginning of its present-day series of income tax laws (under the 16th Amendment to the Constitution). After nine years of this practice and four of allowing capital losses in full, Congress responded to strong complaints that this treatment was seriously impeding the sale of assets on which individuals could realize gains and unduly stimulating the sale of those on which they could realize losses. Beginning with the Revenue Act of 1921 (applicable to 1922), a succession of compromise measures was enacted. In each, capital gains continued to be classified as income, but the application of the rate schedule, the allowance for capital losses, the definition of capital assets, and other provisions were successively modified in different ways in an endeavor more adequately to satisfy one or more competing objectives. Since each new set of provisions was an *ad hoc* compromise, differences of opinion have persisted to this day. Current proposals for change run the whole gamut from complete nonrecognition for income tax purposes of realized capital gains and losses to full inclusion of unrealized as well as realized changes in market values.

The major objections offered to taxing capital gains as ordinary income are: (1) they do not constitute income in a valid economic sense; (2) many of them are illusory, reflecting only changes in price levels or interest rates that leave the real income of the investor unchanged; (3) since the gains an investor realizes in one year characteristically have arisen over a longer period, it is unfair to tax them in full at progressive rates in the year of realization; and (4) substantial taxes on capital gains have various undesirable practical effects upon the mobility of capital assets, incentives to invest, stability of the securities markets,

and stability of government revenues. Let us review these objections, in turn; and, in the process, take note of the opposing contentions.

I. *Are Capital Gains Income?*

Capital gains and losses, it is contended, are not valid elements of true income, as that term is widely used. The traditional concept of income includes only more or less regular and recurring receipts, or, in any event, only those that are more or less expected. An occasional, sporadic gain or loss, especially if unsought and unexpected, does not function like income in guiding conduct or in determining the allocation of economic resources. For this reason, many economists, for their general analytical purposes, though not specifically for those of taxation, confine the concept of income to more or less expected or recurring receipts. Similarly, the accountant usually excludes capital gains and losses from his measure of current income.

Further, it is urged that capital gains do not constitute disposable income for the country as a whole. In many instances they do not represent additions to the total wealth of the country but merely changes in the value of titles to some of this wealth. A reduction in corporate income tax rates, for example, may well raise the market prices of common stocks by several times the amount of the annual tax reduction without adding commensurately, if at all, to the nation's wealth. In other instances, capital gains may reflect real additions to the country's wealth, as when new mines or oil resources are discovered, but these additions cannot be currently consumed. They represent only the capitalized values of expected future incomes. They are capital, not income, it is contended; and taxes on them, therefore, tend to reduce capital accumulation.

Further, to tax capital gains as income, it is argued, puts a double tax on the recipient: first, on the capital value of future incomes; then, on the incomes themselves as they are received. A man who reinvests a capital gain of \$50,000 will be subject to income tax on the future incomes he obtains from the gain; and these incomes constitute his real gain. To tax him also on the principal value of the gain itself is to tax him twice. Similarly, there is a double allowance for capital losses when taxable income is reduced by both the capital value of the loss and the subsequent decline in annual income.

The answers offered to the preceding arguments may be summarized as follows:

1. Although different concepts of income may well be valid for other purposes, the proper measure of income for tax purposes is to be found in the actual *ex post* results of economic activity, not in subjective expectations or presumptions. Taxable income should measure the relative

ability of individuals to pay taxes, as indicated by the net annual additions to their wealth from economic activity plus their consumption. Capital gains supply an individual with the same additions as any other kind of personal income to his power to buy consumption goods or investments.

To exclude profits of this kind from income tax or to grant them sharply preferential treatment seriously conflicts with the purposes of a graduated income tax. Capital gains constitute a major source of income for many individuals. The figures tabulated from income tax returns show that both the average amount of capital gains per taxpayer and the proportion of taxpayers who report capital gains rise sharply as we ascend the income scale. In some years, capital gains have exceeded dividends as a source of income for taxpayers reporting incomes above \$100,000. And the unequal distribution of capital gains among the taxpayers within each income group accentuates the inequity of excluding them from income tax or of giving them unduly preferential rates, it is argued.

Nor do most capital gains differ in underlying economic character from other forms of personal income. They are often deliberately sought as a species of profits. They are rarely wholly "unexpected," but, like ordinary business profits, represent varying mixtures of expected and unexpected elements. In fact, if capital gains did not so commonly constitute a sought reward for exertion and risk, it could be justly contended that they should be taxed more heavily than ordinary income because they would then not serve any function in spurring initiative and exertion or in allocating economic resources.

In practice, capital gains embody large elements of personal compensation, interest, profits, and rents, and often constitute a thinly veiled disguise for these ordinary kinds of income. A conspicuous example occurs when the retention of earnings by a corporation over a period of years causes its stock to rise, enabling its stockholders to obtain the equivalent of these reinvested earnings in the form of a capital gain by selling the shares, or to avoid even a capital gain tax on the appreciation from these reinvested earnings by leaving their stock to their heirs.

2. The allegation that double taxation is involved when both a capital gain and the subsequent annual yield derived from it are taxed and the related contention that this practice reduces the country's stock of capital are not relevant for a personal income tax, it is contended. Individuals are free to consume or to reinvest their capital gains. They are in the same position as those who have accumulated savings from other current income. Savers are also subject to income tax both on the saved portion of their income and on the yield subsequently derived from in-

vesting these savings. In both cases the current income inclusive of new savings and of capital gains measures the addition to the taxpayer's power to command and direct economic resources into channels of his own choosing. Income taxes are designed, among other purposes, to divert a fraction of this total power to the government. Were taxable income confined to consumed income, a sizable fraction of total personal income would be exempt. Conceivably this exclusion might be desirable under some circumstances—a spendings tax might be favored as a substitute for the income tax—but the case for it would not apply peculiarly to capital gains.

All taxes impinge in some degree upon the ability of taxpayers to save and to accumulate capital. One purpose of the income tax—as of estate and gift taxes—is to reduce inequalities in the distribution of income and wealth, even if this entails some reduction in private capital or in current additions to it. Whether the aggregate capital of the country is lessened by the same amounts, depends in part upon what the government does with the tax proceeds. Public roads, school buildings, and the like are also capital goods.

Finally, it is argued that the difficulty of distinguishing clearly on economic grounds between capital gains and other forms of income creates serious administrative difficulties when the gains receive preferential tax treatment and stimulates efforts on the part of taxpayers and their lawyers to convert ordinary income into this form. The tax preference and the associated tax avoidance adversely affect the morale of the general body of taxpayers, whose co-operation is essential for the American system of a self-assessed income tax.

II. *Illusory Gains and Losses from Changes in Price Levels and Interest Rates*

I turn next to two special sources of capital gains and losses: changes in the general price level and changes in interest rates. It is argued that only by excluding capital gains and losses from taxable income can we avoid the unjust and otherwise harmful effects of taxing as income the spurious capital gains that only reflect a rise in the general price level—a depreciation in the value of the monetary unit. Many homeowners experienced this type of illusory gain during and after World War II, when all the money profit they realized from selling a house in one city or neighborhood was commonly needed to help pay for a similar house elsewhere. Allowances for capital losses are held to be similarly inappropriate when they merely reflect a decline in the general price level—a rise in the purchasing power of money.

It is also urged that capital gains and losses resulting from changes in interest rates are similarly unreal. When realized incidentally to a shift of investments, they leave the investor's actual income unchanged.

For example, the income from an investor's securities will remain \$4,500 a year if he sells \$100,000 par value of sixteen-year $4\frac{1}{2}$ per cent bonds he purchased at par at a \$20,000 profit and reinvests the entire proceeds in approximately \$120,000 of $3\frac{3}{4}$ per cent similar bonds at par. When interest rates rise, the resulting fall in the market value of his securities, whether or not realized by sale, will similarly leave his interest income unchanged, because their smaller capital value, invested at the higher rates, will produce the same income as before.

In response to these arguments, it is generally conceded that capital gains and losses arising solely from changes in the general price level are fictitious in the sense that they do not measure real changes in the relative economic status of individuals. But it is contended that an upward or downward movement in the price level usually affects different assets in different degree, actually altering the relative economic positions of individuals; and that ordinary incomes are also affected unequally. Hence, it is impossible to isolate illusory capital gains and losses among the many inequities and disruptions of wide movements in the price level. In the event of radical changes in the price level—such as occurred in various European countries during and after the two World Wars—special countermeasures for capital gains and losses are possible, however. These could take the form, in inflation, of raising the cost basis of capital assets by stipulated percentages, as has been done recently in France and Belgium. Existing provisions protect holders of business assets, in part, by permitting them to postpone recognition of capital gains that are reinvested promptly in similar business property; and a like rule could be adopted for houses or even for all nonbusiness assets. In the event of a drastic fall in prices, on the other hand, it might be necessary to deflate capital values by the use of index numbers or to impose restrictions on the deductibility of capital losses. But the only adequate attack upon the evils of radically changing price levels is through the broad instruments of monetary and fiscal policy, not through adjustments in capital gains taxation.

Capital gains and losses caused solely by changes in interest rates are not illusory in the same sense as those arising from changes in the general price level, it is argued. An investor who realizes a profit of \$20,000 by selling his bonds after interest rates have fallen is in a position to command \$20,000 more of the world's real goods. Relative to other individuals, he has gained in net worth, even though his interest income may remain unchanged.

Bunched Realization of Capital Gains and Losses. The bunched realization of capital gains and losses has always been a major consideration advanced in favor of giving them special treatment. Under the graduated rate schedule of the income tax, the imposition of the standard income tax rates upon capital gains realized in a single year

but emerging over a longer period is held to be inequitable because it usually subjects the gain to a higher effective tax rate than would be applicable if the gain had been allocated among the years during which it arose. In the same way, long emerging capital losses, if concentrated in taxable income in the year of realization, are given smaller tax reducing value.

In answer to this consideration, it is argued that the sporadic and lumpy character of capital gains and losses is true also, in varying degree, of other kinds of income, notably business profits. Moreover, higher rather than lower taxes on long emerging capital gains are sometimes proposed as an interest charge: the taxpayer has enjoyed the free use of funds otherwise payable in taxes during the period he has postponed realizing his gain. The logical method of achieving equitable tax treatment of fluctuating incomes under a graduating rate schedule is not to exclude them but to adopt some system of averaging.

Practical Effects. Overshadowing the foregoing economic and equitable considerations in statements before Congressional committees and elsewhere has been the emphasis upon various undesirable practical consequences said to flow from treating capital gains and losses as ordinary components of taxable income. A taxpayer cannot usually avoid taxes on ordinary income except by foregoing the income itself. But he can avoid the tax on a possible capital gain by refraining from realizing it, yet nevertheless enjoy many of the advantages of the gain in the form of an increase in his wealth and the increased earning power, dividends, interest, or rent the unrealized gain usually reflects.

Since the investor commonly possesses a wide and often unlimited range of choice as to whether and when to realize his gains in a legal sense, any substantial tax on them acts as a serious deterrent to sales of property involving capital gains. The effect is to impose a heavy tax on transfers of such capital assets. In consequence, it is argued that society does not get the benefit of highly fluid markets for capital assets and of the easy and continuous redistribution of them among those most anxious to own and use them. Individuals are deterred from making otherwise desirable shifts in the composition of their assets as their needs change. Another conspicuous contention is that price movements in both directions are exaggerated in the markets for common stocks and other equities by the reluctance of owners to sell when prices are rising in the face of an avoidable tax on their gains, and their added disposition to sell when prices are declining in order to benefit from a deductible capital loss. The accentuated fluctuations reduce the attractiveness of equity investments. Further, since venturesome investment depends in considerable degree upon the prospect of exceptional returns, which are often possible only in the form of capital gains, heavy taxes on the latter are held to deter the assumption of unusual risks.

It is argued, moreover, that the net revenues from any substantial taxation of capital gains and reasonably related allowances for capital losses are negligible over a long period because of the tendency for gains and losses to cancel out and because the realization of losses is encouraged while that of gains is discouraged. Hence it is said that excluding capital gains and losses would improve the stability of the yield from the personal income tax without seriously reducing its average amount. Under existing treatment the freedom of taxpayers to choose whether and when to realize gains and losses enables them to time their transactions so as to minimize their tax liabilities. Well-advised taxpayers are fairly certain to avail themselves of the tax benefits from realizing their losses when they have offsetting income, and to minimize taxes on their gains by realizing them mainly when they have offsetting losses or by not taking them at all, leaving them to pass untaxed (as far as the income, but not the estate, tax is concerned) to their heirs. A low flat rate on capital gains without allowance for capital losses has been urged as a means of increasing revenues by encouraging larger transfers of assets embodying capital gains. Finally, it is argued that the estate and gift taxes provide rough offsets to the avoidance of income taxes on capital gains.

Opponents of the preceding views argue that the alleged adverse effects upon the capital markets of including capital gains and losses in taxable income are greatly exaggerated. Empirical evidence indicates that realized gains and losses have fluctuated mainly with stock prices rather than with changes in tax treatment. Much of the actual impediment to transfers of capital gains is really due to the possibility of avoiding such taxes completely by holding appreciated assets until death. The effective attack upon these impediments, it is urged, is to remove all possibility of avoiding the tax by making every transfer of property, during life or at death, an occasion for recognizing a capital gain or loss and, possibly, by periodically recognizing accrued but unrealized gains and losses. The gift and estate taxes do not offset the inequity of taxing capital gains at lower rates or exempting them because they are payable also by individuals who do not enjoy capital gains and by those who have paid income taxes on realized gains.

The problem of inducing enough venturesome investment cannot be met equitably or adequately by the preferential tax treatment of capital gains because the greater part of the rewards of risk-taking are often, and perhaps usually, obtained from ordinary profits, dividends, and rent. To the extent that we design the tax system to foster this type of investment, we should do so broadly, covering all the rewards for exceptional effort and risk rather than a single and often spurious form of such rewards.

Even though capital gains and losses may conceivably cancel out in

the long run for taxpayers as a whole, they do not do so for particular individuals. The net capital losses of some taxpayers do not justify complete tax exemption or preferential rates for the capital gains of others. Our taxation of capital gains, despite preferential rates, has actually yielded substantial revenues, only a portion of which can be attributed to the restricted deductibility of net capital losses. The irregularity of the revenues is not a solid reason for relinquishing them. Business profits, too, are notoriously unstable as a source of tax revenue. Reduction of the public debt is an excellent use for the surplus revenues of good years; and a revenue source that automatically declines in bad years has the virtue of lessening the adverse effects of federal tax collections upon private spending in periods of depressed business.

The conflict of considerations barely summarized above is the "problem" of capital gains and losses. To devise a tax treatment for them that will most nearly satisfy the demands of equity—of giving equal treatment to similarly circumstanced individuals—and at the same time avoid unduly impeding useful transfers of capital assets. The major proposals for meeting this problem fall into two broad groups. One group seeks the full inclusion of capital gains and losses in taxable income, while minimizing the undesirable effects by averaging them or averaging total income over a number of years, or by including unrealized as well as realized changes in market values of capital assets. The other group would compromise the conflicts of equitable and practical considerations by various *ad hoc* measures of the same general character as those employed in the United States since 1922 but with increased or reduced recognition of capital gains and losses as components of taxable income. Common to both groups is the question whether and to what extent unrealized appreciation and depreciation should be recognized, particularly upon transfers of property by gift or at death.

Finally, from the welter of conflicting considerations that I have barely sketched, I have omitted an obscure, seldom expressed, but real, influence. That influence is a sentiment. Few persons like to see a baseball game in which there are no runs, no hits, and no errors; or a football game in which no one makes a touchdown. Many Congressmen and other persons have a similar feeling about the tax system and the chances of achieving outstanding financial success. They do not want an airtight tax system. They want to preserve the opportunity for a man to make a financial homerun, a touchdown, a killing. The preferential tax treatment of capital gains has the virtue, in their minds, of offering just such an opportunity.

HOW SHOULD WEALTH TRANSFERS BE TAXED?

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I

A tax on wealth transfers is to the economist a form of capital levy.

In the more precise language of the lawyer, however, such taxes have been described as "excises imposed upon the occasion of change in the legal relationships to property." They are not direct taxes imposed on property as such, but are indirect levies on interests in property.

The oldest and most widely used of the transfer taxes are those imposed at the time of death. In some countries and states such taxes are imposed on "the interest which ceased by reason of death," while in others the object of taxation is "the interest to which somebody succeeds on a death."¹ Taxes of the former sort usually go by the name of estate taxes, while the latter may be referred to as legacy, succession, or inheritance taxes. A less widely used form of transfer tax is the levy on gifts which some governments employ as a means of supplementing and reinforcing their death taxes. Gift taxes may also serve to implement income tax policies. Under our present steeply graduated income tax, many wealthy individuals find it to their advantage to distribute income yielding assets among those members of their families who normally would look to them for support. A gift tax offsets, at least in part, the tax savings which may be gained from income splitting.

In the United States, the federal government has had an estate tax since 1916 and has taxed gifts since 1932. Both of these taxes were employed for brief periods earlier in our history, but it is only since the thirties that they have played a significant role in the federal tax system. Up until 1932, estate tax rates were relatively low, the top bracket rate at no time exceeding 25 per cent; and not until 1939 did the rate structure begin to take on the appearance of that in effect today. Under present law, rates are graduated from 3 per cent of net estates not in excess of 5 thousand dollars to 77 per cent of those in excess of 10 million. Since 1932, gifts have been taxed at rates equal to 75 per cent of those applicable to estates.

Although our early experiments with death taxes appear to have been prompted primarily by revenue considerations, neither the estate nor the gift tax has ever been an important source of federal revenue. During the late thirties, when estate and gift taxes together represented about 7 per cent of total receipts, collections from this source reached a peak of 416 million dollars in 1938. Following the wartime increases

¹ *Knowlton v. Moore*, 17 U. S. 41 (1900).

in income and excise taxes, the transfer taxes declined in relative importance even though their yield nearly doubled between 1940 and 1948. In the latter year, when estate and gift tax collections came to almost 900 million dollars, they accounted for only 2 per cent of total budget receipts.² For 1950, largely as the result of the marital deduction granted by the 1948 Revenue Act, it has been estimated that the yield of these taxes will be only 650 million.³

The explanation for these relatively low yields is found partly in the rather high exemptions allowed and partly in the loopholes in the present law which have been freely utilized for purposes of tax avoidance. At present, an exemption of 60 thousand dollars is allowed for purposes of the estate tax, and one of 30 thousand may be taken on all gifts made during the lifetime of the donor. In addition, annual gifts not exceeding 3 thousand per donee are excluded from the gift tax base. As a result, it appears that the estate tax applies only in the case of one out of every hundred adult deaths in this country, and that the gift tax is felt in an even smaller number of cases.⁴

Prior to 1932, with the exception of the years 1924 and 1925, the principal avenue of escape from the estate tax was the possibility of tax-free *inter vivos* transfers. Although this loophole has been partially closed, it still is possible for those who are willing to divest themselves of a part of their wealth before—but not too soon before—death to enjoy substantial tax savings thereby. Tax savings can also be effected by the use of special powers of appointment and of the life tenant-remainder sequence. Both of these devices are known to be widely used; indeed, it is believed that roughly one-half of all inherited property is transmitted so as to skip at least one generation.⁵

Despite the insignificant contribution which the estate and gift taxes are currently making to the federal revenues, they have an important place in the present-day tax system. Their role, however, is not so much a fiscal as a social one. Their primary purpose, as is widely recognized and accepted, is that of preventing undue concentration of wealth. That this may be regarded as a proper objective of tax policy is, of course, no novel doctrine; nor is it one to which only socialists and other radicals subscribe. Among the advocates of high death duties on large estates may be found such "rugged individualists" as Andrew Carnegie in this country and Lord Leverhulme in England. But transfer taxes imposed at rates high enough to prevent great inequalities in

² *Annual Report of the Commissioner of Internal Revenue, Fiscal Year Ended June 30, 1948, Table 6.*

³ *The President's Budget Message for 1950, p. M11.*

⁴ See address of Joseph J. O'Connell, General Counsel of the Treasury Department, before the California State Bar, September 28, 1948.

⁵ See Harold Groves, *Postwar Taxation and Economic Progress*, p. 275.

wealth must, in the United States, clearly be the responsibility of the federal government. The desire of individual states to attract and to hold wealthy residents would be almost certain to result in a competitive lowering of transfer tax rates if these taxes were returned to the states as some have suggested, apparently with this thought in mind.*

Unless, therefore, we are prepared to abandon the social purpose of the estate and gift taxes—and I personally do not believe that the majority of the citizens of this country are prepared to do this—it follows that the question of how wealth transfers ought to be taxed must be answered primarily with reference to federal policy. What revisions in the federal estate and gift tax structure are needed in order to have an equitable and effective transfer tax? I propose to deal with this problem in two pieces. First, I shall consider the question of particular structural defects in the present system of transfer taxes and some of the proposals which have been advanced for their correction. Second, I shall take up briefly the question of how a structurally improved transfer tax should be employed in an economy such as ours, with due regard to its effects on both distribution and production.

II

As regards the first of these questions, I think it is safe to say that hardly anyone who is familiar with the operation of the present estate and gift tax statutes is satisfied with them. Statutory inconsistencies and ambiguities have in the course of time been overlaid by conflicting court decisions to the end that one can never be entirely sure of the tax consequences that may be expected to follow particular modes or methods of transfer. Moreover, since small differences in the form in which, or the channels through which, transfers are made can result in substantial differences in tax burdens, estate planning has become a highly specialized art in the practice of which the rewards do not always go to the most deserving. In other words, under the present law, taxpayers are confused and irritated, litigation is encouraged, and tax burdens are distributed in an inequitable, capricious, and frequently unpredictable manner. I suspect that even those lawyers who might expect to take many a fish out of such troubled waters would subscribe to Mr. Surrey's dictum that "it is essential that these taxes be rescued from the technical morass into which they are sinking."¹

One of the major defects of the present federal estate and gift tax structure is the dual system of rates and exemptions. Because separate and additional exemptions are allowed with respect to *inter vivos* trans-

* See, for example, the discussion of federal estate and gift taxes in *A Tax Program for a Solvent America*, a report prepared by the Committee on Postwar Tax Policy in 1945.

¹ Stanley S. Surrey, "Federal Taxation of the Family—The Revenue Act of 1948," *Harvard Law Review*, Vol. LXI, p. 1160.

fers, because such transfers are subject to lower rates of tax, and because gift taxes as well as the gifts themselves reduce the size of the estate at death, the question of whether a particular transfer is to be regarded as a gift or as a testamentary devolution is one of considerable importance both to the taxpayer and to the government. At an early stage in the development of the estate tax, Congress recognized that deathbed gifts were essentially no different from bequests; but its attempt to restrict the exclusion from the estate tax base to gifts not "made in contemplation of death" has resulted in an admittedly "unworkable" statute. Similarly, the dual system has lent an exaggerated importance to the date when a disposition made during life is deemed completed. For example, in the case of dispositions made subject to a power to change the beneficial enjoyment of property vested in the donor, in some other person, or in both together acting in agreement, the law makes a seemingly tenuous distinction between a power held by the transferor in conjunction with another person and a power held solely by another person. It is important for the taxpayer to know that a power of the first type, but not of the second, postpones the completion of the transfer until death unless the power is relinquished before that.

A second major defect in the present transfer tax structure is the absence of a correlated definition of a transfer under the estate, gift, and income taxes. Situations may arise where a gift of property is deemed a completed transfer under one of these taxes but at the same time is considered incomplete under another. Such inconsistencies introduce unnecessary complications into gift and estate planning.

Two proposals have been made for the correction of these defects, neither of which would require a very great departure from present concepts of taxation. The first proposal, which has been worked out in considerable detail by the Treasury Advisory Committee on Federal Estate and Gift Taxes, calls for an integrated transfer tax which would extend the principle of the present gift tax to include dispositions made at death.⁸ As many of you know, the present law provides that, in computing the tax on gifts made in any given year, account must be taken of all gifts made in prior years. The tax is first computed as though all such gifts had been made currently and then a credit is taken for the taxes paid in prior years. Under the proposed integrated transfer tax, a tentative estate tax would be computed with reference to a base that would include all lifetime transfers but not the taxes paid on them. Credit against this tentative tax would then be allowed to the extent of gift taxes previously paid by the decedent. Thus it would make little difference taxwise whether property was disposed of before or at death.

⁸ *Federal Estate and Gift Taxes—A Proposal for Integration and for Correlation with the Income Tax* (U. S. Government Printing Office, 1947).

The second proposal, which has been advanced by a well-known tax practitioner, Mr. Harry Rudick, would replace the present estate and gift taxes with a cumulative tax on accessions.⁹ Under this plan, there would be no tax on the donor or his estate, but the individual beneficiaries would be taxed at progressive rates on their cumulative acquisitions. In other words, the tax paid with respect to any particular gift or bequest would depend not only on the size of that transfer but also upon the aggregate amount of all previous transfers. Again, the form and timing of the transfers would have little bearing upon the amount of tax ultimately paid.

Both of these proposals for integrating death and gift taxes would eliminate the need for a contemplation of death statute. Both would cut down appreciably the importance of the date when an *inter vivos* transfer was deemed to be completed. Both would lend themselves to a closer correlation of the transfer concepts employed in the transfer tax and in the income tax. Thus either would substantially accomplish the desired technical objectives of transfer tax reform. They would not, however, appear likely to have the same revenue effects. An integrated transfer tax, by completely closing the gift tax loophole, should yield increased revenue even if we assume the continuation of exemptions roughly comparable to those currently allowed, whereas an accessions tax would probably not yield as much as the present estate and gift taxes taken together. The actual revenue effects would, of course, depend upon the rates and exemptions adopted at the time of the change-over. On the whole, it would appear that an integrated transfer tax would permit of lower exemptions and steeper graduation than would an accessions tax. The revenue effects of these proposals would also depend on the extent to which opportunities for tax savings under the gift tax are currently being exploited, and on the pattern of property distribution as wealth is passed from one generation to the next. Although there is some evidence that gifts represent a surprisingly small fraction of the transfers ultimately made at death and that present gift tax exemptions are now rarely exhausted, both points would bear further investigation. Similarly, our present knowledge of the manner in which property is distributed at death needs considerable supplementation before we can make any very confident predictions concerning the revenue effects of an accessions tax.

To the extent that integration would result in heavier taxes on gifts or in their discouragement, the question might be raised of the desirability of this result. The present degree of differentiation between gifts and bequests has sometimes been defended on the grounds that wealthy individuals should be encouraged to distribute their property before

⁹ Harry J. Rudick, "A Proposal for an Accessions Tax," *Tax Law Review*, Vol. I, pp. 25-43.

death and that such action would lead to a more equal distribution of property. One weakness in this argument lies in the fact already noted that the amount of property transferred by gift is quite low. Furthermore, even though this situation were to change with increasing tax consciousness on the part of potential donors, an increase in *inter vivos* transfers need not contribute very much to wealth equalization. Gifts made by wealthy individuals are likely to go to people who are also well off. Such redistribution of property as is prompted by the present tax differential would not seem to justify its size. On the other hand, the lower rates applicable to gifts may in some cases facilitate the transfer of closely held business properties and so ameliorate the pressure for liquidation which the estate tax is said to be exerting upon the owners of small enterprises. Here again, more facts are needed, but under present rates what evidence there is suggests that the gift tax differential is not a major factor in determining the timing of business property transfers.

A third major defect in the existing transfer tax structure relates to the treatment of special powers of appointment and life estate-remainder sequences. For example, under present law, if A dies leaving property in trust for his son B for life with remainder to B's son C, the property in question would be taxed at the time of A's death but would not again be taxed when B dies. Or, instead of naming C as the remainderman, A may give B the power to appoint his successor to the estate. So long as this power of appointment is limited to certain specified individuals, there will again be no transfer tax liability at the time of B's death. Although it can be argued in both of the above cases that there has been but a single transfer of legal title to property and that, therefore, but a single transfer tax is appropriate, it seems equally demonstrable that there have been two transfers of the right to enjoy property. Admittedly, a life estate with or without powers of appointment is not the same thing as an outright bequest, but even though one might not be prepared to tax transfers of the former sort as heavily as the latter, there would seem to be no valid grounds for exempting them altogether.

The British, with more of an eye to substance than to form, tax life estates as though the whole estate passed outright on each occasion of a change in the life tenant. Moreover, the trust property and the life tenant's own property are combined into a single tax base for purposes of computing the tax. This method of handling the life estate-remainder problem could easily be incorporated into the integrated transfer tax proposed by the Advisory Committee.¹⁰ If applied to exist-

¹⁰ The Advisory Committee itself did not recommend any solution to the life tenant remainder problem. For its comments on this problem see page 62 of its report.

ing as well as future trusts, it would go a long way towards removing the inequities in the present treatment of life estates. At the same time it would substantially increase the revenue from an integrated transfer tax. On the other hand, the aggregation of trust property and of the life tenant's property in order to determine the rates applicable to the whole could produce rather harsh tax consequences in those cases where the life tenant has only a limited enjoyment of the trust. Difficulties might, for example, be encountered in dealing with discretionary trusts, accumulation trusts, annuity-insurance arrangements and the like.

The proposed accessions tax offers an alternative method of taxing life estates—one which would remove some of the tax advantage now enjoyed by life tenants without going so far as the British do. Under Mr. Rudick's proposal, the estate would remain intact until the termination of the trust, but income received by the life tenants would be subject to accessions tax. The amount of the income and tax would be determined actuarially, at least in the first instance, and would then be prorated over the expected life of the tenant. The accessions tax would be allowed as a deduction in computing income subject to income tax, thereby precluding the possibility that the combined taxes would ever exceed the income from the trust.

Since the base of the accessions tax would include only such parts of estate or trusts or of the income therefrom expected to pass into the possession of the life tenant, this approach to the life estate-remainder problem avoids the difficulties mentioned above in connection with the transfer tax approach. Indeed, some of those who favor the latter approach to the broad problem of taxing wealth transfers have considered the possibility of a supplementary accessions tax for life estates. On the other hand, since a slight encumbrance or contingency attached to a bequest could defer or even void a part of an accessions tax, opportunities for tax savings through expert legal draftsmanship would be afforded. The tax might, of course, be graduated with respect to the different degrees of control which the life tenant could exercise over property ultimately going to the remainderman. Such a scheme would, however, probably add more to the complexity of the tax than it would contribute to its equity.¹¹

If some satisfactory method can be worked out for dealing with discretionary trusts and other special situations of this sort, the British method of taxing life estates would appear to offer greater assurance of over-all equity than does the Rudick proposal. The latter plan would still leave the individuals named in a life tenant-remainder sequence

¹¹ For further comments on this scheme see William Vickrey, *Agenda for Progressive Taxation*, p. 213.

substantially better off than those who inherit outright. Life estates would, as Mr. Rudick himself concedes, continue to receive encouragement. Whether this encouragement can be justified on economic grounds is a debatable question. The spreading of the accessions tax over the life of the life tenant would afford more time for the liquidation of business properties or for the accumulation of funds needed to settle the government's claims against the estate than is customarily permitted today. This plan would, therefore, meet one of the principal complaints against the present level of estate tax rates; namely, that it is hurting small business. But the relief afforded would, of course, not be confined to estates comprised mainly of small business properties. Against the contribution which this scheme would make in the hardship cases must be weighed the revenue loss in those cases where no hardship is present.

Despite these differences of opinion concerning the best way of meeting the life estate-remainder problem, there appears to be a general disposition on the part of all concerned to treat generously a life estate in the wife or husband. Rudick would not have his accessions tax apply in such cases, and among those who favor the more severe British method, there are at least some who would impose no transfer tax unless enjoyment of property passes outside the husband-wife unit.¹² Under either approach, therefore, death taxes would be postponed until the death of the second member of the unit.

A final defect in the present estate and gift tax law to which I can refer only briefly here is the unlimited exemption of charitable gifts and bequests. The so-called "charitable trust" has, in particular, become a much discussed instrument of tax avoidance; and although the number of such trusts is probably not large at the present time, the wide publicity that has been given a few of the more notable ones has undoubtedly caused other wealthy men to investigate their advantages. As a nation we have always depended somewhat more on voluntary giving and somewhat less on taxation for the relief of the poor and for other social purposes than have other nations. Whether this is good or bad need not concern us here. The charitable deduction as such is hardly likely to be given up in the foreseeable future; but especially in the case of the transfer taxes, we should make certain that this deduction is not being used as a method of defeating their primary objectives. To the extent that the charitable trust permits the control over vast accumulations of property to be retained within a family group from one generation to the next, it would seem to be thwarting the clear intention of Congress when it enacted a steeply graduated estate tax. To be sure, the income from such properties may not be used for other than charitable purposes, but the loss of income may be considered

¹² *Surrey, op. cit.*, p. 1161.

more than a fair price to pay for the retention of control over the properties themselves. A strong case can clearly be made for limiting the deduction for charitable donations to situations where control as well as benefits are surrendered.

III

The correction of the major defects in the federal estate and gift tax structure along the general lines indicated above would give us a simpler, more equitable, and much strengthened tax on wealth transfers. There now remains to be considered the exact role which such a tax should be assigned in the federal tax system of the immediate future. Presumably its primary purpose would continue to be the social one of checking hereditary accumulations of wealth. But to what point should this objective be pursued? How broad should the base of the tax be, and how steeply should the rates be graduated especially in the lower and middle brackets? And what account should be taken of the relationship of the transferor to the transferee? In attempting to answer these questions, considerations of equity must be balanced against the desirability of probable economic effects. Not only should the burden of a tax on wealth transfers be fairly distributed but the tax itself should not interfere unduly with production and employment.

What is the test of fairness in the case of a transfer or accessions tax? Is it, as in the case of the income tax, ability to pay? And if so, whose ability do we want to measure: the transferor's or the transferee's? The test of ability to pay is not an easy one to apply to transferors. At the time of death when the tax is reckoned, the decedent's ability to pay may be said to be all or nothing. Only if it is assumed that the transferor makes provision during his lifetime for the tax he will incur upon his death can the test be given its normal subjective application. The more questionable we hold this assumption to be, the less we can rely on ability to pay as a test of fairness.

Ability to pay is a more useful test of fairness in its application to transferees. In such cases it might be measured with reference to specific legacies, as is now the practice in many states, or in terms of all legacies received during the lifetime of the beneficiary, as Mr. Rudick has suggested. Of these two alternatives, the latter would certainly appear to be the more reasonable approach. Or ability to pay might, of course, be measured in terms of income received from all sources over a given period of time, with gifts and bequests being treated as income for purposes of taxation. This latter treatment would be consistent with Haig's concept of income as "the money value of the net accretion to one's economic power between two points of time." It would also seem to be the only logical stopping point if one accepts the principle of tax-

ing wealth transfers in the hands of the transferees. On the other hand, its adoption would require both a constitutional amendment and the use of a longer accounting period than is now used for purposes of taxing income.

There is another test of fairness which is more specifically applicable to taxes on wealth transfers. Since such taxes may be regarded as encroachments upon the rights of bequest and inheritance, their fairness may be tested with reference to the ethical bases of these rights. Wedgwood, in his penetrating analysis of the justification of inheritance, cites the "reasonable expectations" which the wife or dependent children of a deceased husband or father have for continued support from his estate.¹³ In the same sense it might be said that the obligation of a man to support such close relatives as are incapable of supporting themselves does not cease at death, and that a tax which did not permit the fulfillment of such obligations would be an unfair tax. If, with Wedgwood, we hold that only wives and dependent children can ordinarily have reasonable claims upon the estate of the husband or father, any degree of taxation with respect to the inheritances of other parties could be defended on equity grounds. If, on the other hand, we do not feel sure where the line should be drawn between reasonable and unreasonable expectations, equity would appear to require that the tax should at least be graduated in accordance with the economic circumstances of the beneficiary and his relationship to the decedent. Those holding the first position would presumably press for a transfer tax with high rates and low exemptions, but with liberal deductions for wives and dependent children. Those holding the second one would probably favor the accessions approach.

But even though equity considerations might justify higher taxes on wealth transfers, would such policies be compatible with the production and employment objectives of our present-day economy? There are some businessmen who even now contend that the estate tax (with all its loopholes) is "an effective brake upon the private enterprise system" or is "slowly but surely destroying small business."¹⁴ These are serious charges which cannot be ignored even though the evidence which has thus far been submitted in their support is none too impressive. As regards the more specific charge, it is probably true that many small businesses have been liquidated since the war; where there is so much smoke, there must be some fire. But to hold the estate tax primarily responsible for such liquidations is to disregard other important con-

¹³ Josiah Wedgwood, *The Economics of Inheritance*, Ch. VIII.

¹⁴ See, for example, the statement of Roy C. Osgood, representing the United States Chamber of Commerce at the Hearings before the Committee on Ways and Means, House of Representatives, Eightieth Congress, First Session. (*Revenue Revision 1947-48*, Part 3, p. 1532.)

tributing factors. For example, the present low-rate tax on capital gains has undoubtedly influenced decisions to sell going concerns at the high prices which have prevailed since the war. Furthermore, even though small businesses may have been liquidated in anticipation of heavy estate taxes, this tax cannot be fairly blamed for defects in the capital market. The need for providing channels through which equity funds can be more easily and less expensively supplied to small business has long been recognized. If these channels could be opened up, the estate tax problem would be greatly eased for those persons whose wealth consists largely of business assets. In any case, the government should continue to co-operate in arranging convenient schedules of payments in order to avoid forced liquidations at excessively low prices.

As regards the broad charge that taxes on wealth transfers are retarding the progress of the economy, I think that the consensus among economists today is that, dollar for dollar, taxes on wealth transfers are less damaging to work and investment incentives than taxes on income. There are a number of motives which impel men to work and save. Some simply want to die rich, others are striving for power, and still others keep going for the sheer love of "the game." Motives such as these are not likely to be much affected by death taxes. On the other hand, some men accumulate wealth so that they can provide a secure and comfortable living for their children. Beyond a certain point, estate taxes would probably weaken the work and investment incentives of such men; but against this must be offset the greater work incentives of the children who would be forced to depend to a greater extent on their own efforts. While it is probably true that estate taxes are paid out of savings to a greater extent than income taxes are, there is today at least no evidence that investment is being held back for want of funds. Concerning the much publicized shortage of equity capital, it might even be argued that the attempt to maintain estates intact for a succession of heirs has been one of the factors responsible for the diversion of funds into "safe" investments.

IV

In conclusion, I believe that the federal government should continue to tax wealth transfers and that it should tax them in a more consistent and less haphazard manner than they are now being taxed. Second, I think that it should continue to tax interests which cease by reason of gift or death rather than the interests to which individuals succeed, although if an accessions tax is the only practical or politically feasible method of solving the life estate problem, I would accept it, preferably as a supplement to an integrated transfer tax on ordinary gifts and bequests. Third, I believe we should explore the possibility

of setting up a new basis for exemptions in which the responsibilities of the decedent rather than his right of bequest would determine the size of the exemption. And, finally, I think that we should seek to supplement as rapidly as possible our scanty knowledge of the effects which death taxes are having on private investment and asset distribution. Even though the economic arguments against present transfer taxes may strike us as inconclusive, it behooves us as economists to make every effort to get the true facts. It is to be hoped, therefore, that these taxes can, in the not too distant future, be given the same intensive study that Professor Seltzer has given to the capital gains tax.

EQUITY VERSUS EFFICIENCY IN FEDERAL TAX POLICY

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The appraisal of a tax system presupposes knowledge of the differences which various taxes make in the operation of a society. It also presupposes social norms to provide a basis for evaluation. On occasion, these norms may conflict. The following remarks are designed to explore some of these conflicts as they apply to federal tax policy.

I

Of the various differences which taxes may make in the operation of an economic system, there is the obvious one that a tax, by imposing an obstacle to some course of action, induces a different course of action. A commodity tax, for example, creates an incentive to withdraw resources from the production of the taxed item. These resources are thereby made available to produce other commodities. The community obtains, because of the tax, a different composition of products. Taxation may by virtue of such effects induce a better or worse pattern of resource allocation, judged from the point of view of some norm of ideal allocation. This is one efficiency test of a tax system.

Taxes which have a yield, whether or not they occasion any resource allocation effects, also remove money from some persons or organizations. It is safe to assume that if the state manages to collect revenue by taxation, the money so obtained must come from somewhere. This effect I shall call the "income effect" of taxes. Income in this context means money, not real, income. The income effect of taxes is always negative with respect to private groups and positive with respect to the government.

As a consequence of the income effects of taxes, private groups successfully taxed are placed under certain constraints. They must restrict their expenditures or reduce their cash balances as compared with the money they could have spent or held in the absence of taxation or they must sell claims or real wealth. These constraint effects of taxes operate because in this world private groups do not possess infinite financial means. Further, those successfully taxed are thereby handicapped in the competition for current output and wealth as compared with those who are taxed less heavily or not at all.

These possible effects suggest another efficiency test of a tax system. If we accept as a goal that taxes should be so designed as to reduce private expenditures upon output, various tax devices may be ap-

praised in terms of their efficiency to curtail private demands. This efficiency goal is an important feature of functional finance doctrine.¹ Tax devices which reduce expenditures rather than idle balances or private holdings of old assets or claims are by definition more efficient in terms of this goal. Obviously this test suggests that taxes be selected which rest upon persons or organizations whose financial position requires them to reduce their expenditures. According to prevailing theories, these groups are found in the lower income strata of society. Here we find one of the most potent contemporary arguments being employed against progressive taxation. It is surprising that die-hard opponents of progressive taxation have failed to appreciate what a friend they have in Professor Lerner. This oversight will no doubt be remedied, now that Professor Wright has shown the way.² This apparent conflict between equity goals and deflationary efficiency in taxation is one I should like presently to explore in some detail.

The income effects of taxes may also alter the pattern of private expenditures. Even poll taxes, often cited as an example of a completely neutral tax, would only by accident leave relative private demands for products unchanged. Specifically, taxes may induce people to economize on their consumption expenditures, their investment expenditures, or both. In addition to the financial constraints of taxation on investment, the anticipation of future taxes may reduce aggregate investment and may also induce a different pattern of demands for particular kinds of new real assets. Thus another source of possible conflict between equity and efficiency goals emerges. If progressive tax devices impair investment and distort the pattern of investment demands, we are forced to choose between less income inequality and investment efficiency objectives.

Before examining these conflicts between equity and efficiency considerations, I should like briefly to restate the case for equity in tax policy.

II

The appeal of equity in taxation is as compelling as the ethical preconceptions upon which it rests. Equity is an equalitarian idea. Equalitarianism, adopted by early thinkers in this country from French eighteenth century thought, has by tradition, repetition, and persuasion become a fundamental feature of the American Creed. In

¹ Cf. Abba P. Lerner, *Economics of Control* (New York, 1944), p. 308, and also his paper "The Inflationary Process: Some Theoretical Aspects," *Review of Economics and Statistics*, August, 1949.

² David McCord Wright, "Inflation and Equality," *American Economic Review*, December, 1948, pp. 892-897, and also his book *Democracy and Progress* (New York, 1948), Ch. 7.

economic circles, by contrast, utilitarian ethics continue to provide the main rationale for equalitarian fiscal measures because of the dominance of the English neoclassical school of economic thought. In its prime, utilitarianism achieved a remarkable success. Its case for progressive taxation was rooted in the very fundamentals of economic thinking—marginal utility analysis. Opponents of progressive taxation were placed in the awkward position of appearing merely incompetent. Yet utilitarianism provides a defense for equalitarian measures by using an ethical postulate foreign to its basic doctrine—the principle of maximum utility or happiness. Such a principle can be turned into a rationale for economic and political plutocracy by assuming that persons already wealthy or powerful have a much greater capacity for happiness than the poor. The doctrine has been used to defend progressive taxation because of the ethical assumption that persons should be treated as having the same capacity for enjoyment. As A. C. Pigou, perhaps the ablest expounder of the utilitarian ethic as applied to taxation, has put the point: "The day in which the welfare of one category of citizens could plausibly be ranked above that of another is past."³ Yet if proper evidence could be obtained, the greatest happiness doctrine might support no change in the distribution of personal economic power or any conceivable degree of shift in such power. If Professor Pigou had elevated the proposition that persons should be considered equal to an ultimate ethical principle, instead of the least aggregate sacrifice doctrine, he would have discovered a sufficient justification for taxation designed to minimize economic inequalities. Utilitarianism adds nothing further in support of progressive taxation once the principle is accepted that persons are to be considered equals, and without this equalitarian principle, utilitarianism does not provide a justification for progressive taxation.

In a society committed to democratic ideals, equalitarian measures require no special defense on ethical grounds. Special privilege and caste are repugnant to the creed that persons should be viewed as equals and these ideas cannot be restricted, as some might like, to mere rights to vote. They apply with equal force to privilege and caste as exhibited in the distribution of personal economic power. These ethical conceptions rather than the tortuous application of marginal analysis to utilitarianism provide the fundamental defense for equalitarian devices, judged on ethical grounds alone.⁴

Basic as equalitarian ideals are in contemporary life, their practical application involves the danger of undermining efficient operation of a

³ A. C. Pigou, *A Study in Public Finance* (3rd rev. ed.), p. 43.

⁴ Henry Simons has ably and forcefully expounded a similar point of view. See his *Personal Income Taxation* (Chicago, 1938), pp. 1-40.

money-price economic system. Have we in this country reached or surpassed the point where further pursuit of equity goals in taxation will impair efficiency? In my opinion, this is a crucial issue in contemporary fiscal policy.

III

Let us examine the theory that adequate deflationary effects of tax devices require a redirection of policy toward less equalitarian tax devices. Under conditions of full employment and inflationary pressure, the case for shifting to less progressive taxation appears strong. To offset inflationary pressure by taxation, money must be taken from people who would otherwise spend it. If, then, from misguided notions of equity we treat such groups tenderly, they bid up prices anyway. Consequently they are made no better off because of light taxation. If to this line of thought we add the observation that wealthier groups in the population do not curtail their expenditures much per dollar of tax yield, it seems to follow that heavier taxes on the lower-income strata become the only effective alternative to higher prices for the things they want.⁵

This type of argument for less progressive taxation is not logically restricted to periods of inflationary pressure; it can be applied to any circumstance. If the achievement of some proper level of private demand for output requires that the government exercise a large positive monetary effect, a remedy is tax reduction, conceivably to virtually no yield at all. But for any aggregate amount of deflationary pressure a tax system is asked to provide, assuming such pressure is to be greater than zero, it is nevertheless true that some kinds of taxes will achieve this result more efficiently than others. The efficiency criterion may be dressed up in the usual marginal terms. Given the particular amount of tax-induced deflationary effect desired—and this is to be decided with reference to whatever levels of private expenditures are deemed most appropriate—those tax devices should be selected which provide the maximum deflationary effect per dollar of yield and each such device should be pushed to the point where the deflationary effect per dollar of yield is equal. Here we have a maximization test to govern the selection of tax devices which has the merit, or lack of merit, of resting upon economic considerations alone.

The logic of this functional finance type of argument for less progressive tax devices is not refuted by the opposite claim that the best tax system is one which is least deflationary per dollar of yield. During

⁵ Cf. A. P. Lerner, "The Inflationary Process: Some Theoretical Aspects," *Review of Economics and Statistics*, August, 1949, p. 199, and Fritz Machlup's comment in the same issue, p. 210.

the thirties progressive taxation was commonly defended on just these grounds. In his suggestions for postwar tax policy, R. A. Musgrave makes this consideration the basic requirement of tax policy. Thus he writes: "Taxes should be relied upon which depress private expenditures least."⁶ This defense for "soaking the rich" requires the assumptions that, by and large, private groups left to themselves will spend too little, and the financial alternatives to taxation methods of financing government expenditures are unavailable or inappropriate. Granted the assumption of continuously deficient private expenditures upon output, unpalatable as it may be, it does not follow that taxing the rich is better than not taxing them. Taxes force them to curtail their expenditures somewhat, and to that extent, taxation defeats the purpose of maximizing the government's total inflationary effect. The defense for taxes which occasion only a small reduction in private expenditures per dollar of yield must therefore rest on other grounds. Professor Musgrave, who is entirely clear on this point, chooses the ground that high tax yields are the only effective alternative to large increases in government debt, and huge government debt creates serious social problems. But such a view is exposed to the criticism that increases in debt need not be and, granted the assumption of deficient demands, should not be the alternative to high tax yields. The federal government by virtue of its control of the banking machinery can, and on occasion does, finance deficits without going into debt in any meaningful sense. A sale of debt by the Treasury can be offset or more than offset by purchase of debt by the Reserve banks. It is the net debt defined as the debt held outside the Treasury and government agencies, including the Reserve banks, which matters. Furthermore, because net sales of debt are deflationary with regard to private demands, if indeed they have any effect at all, proper policy in a setting of markedly deficient private demands calls for debt purchases rather than sales. For these reasons, the view that tax policy should be designed to cause the least reduction in private demands cannot be supported on economic grounds, and in this regard it is inferior to the criterion of maximum deflation for a tax system. Both of these doctrines, it should be noted, favor less progressive taxation in settings of inflationary pressure.

The question still remains of whether the goal of maximum deflation provides a valid rebuttal to equity claims in tax policy. The conflict would not exist if there were no important differences between various types of taxes with regard to their deflationary effect per dollar of yield; then one set of tax devices would be just as efficient as another. This issue need not be raised here. The deflationary efficiency goal itself

⁶ Richard A. Musgrave, "Federal Tax Reform" in *Public Finance and Full Employment* (Board of Governors of the Federal Reserve System, 1945), p. 24.

has little to recommend it as an objective of tax policy. The deflationary test, like any efficiency norm, is compelling to the extent that the means to achieve an end need to be economized and to the extent that the end itself is a valid goal. The goal of achieving a given deflationary effect is a valid one for a tax system. Although it is wrong to suppose that the only function of taxes is to curtail private expenditures, a tax system which cannot succeed in doing so leaves the alternatives either of not offsetting the government's money injection activities or of relying completely on other offsetting devices such as central bank action. But if a number of tax devices and a number of different tax yields would provide the same deflationary effect, the selection of those with a minimum yield becomes justified only if tax dollars are to be economized. Is this assumption correct?

Small tax yields may be preferred to large on the grounds that people dislike paying taxes and the less they are taxed the better. For this conclusion to follow, the gain of those lightly taxed must be greater than the loss of those more heavily taxed. Such a comparison can be made only if some ethical postulate is adopted to make interpersonal comparisons of gains and losses meaningful. This brings us back to equity, and on equity grounds a progressive tax with a higher yield is definitely preferable to a regressive or proportional tax of smaller yield. This argument for less progressive tax devices must therefore be rejected.

Low yields may be preferred to high on administrative grounds. It may be less costly to collect a smaller than a greater tax yield. Yet even on this score, it is an open question whether it is administratively simpler to collect say 25 billion dollars per year from the less wealthy than to collect say 40 billions from the wealthier groups. There are serious difficulties in collecting taxes on any systematic basis from people with small incomes.

There is one circumstance which could conceivably provide some support for a preference for smaller tax yields. If the real resources supplying products to different classes of income recipients are highly immobile, the taxation of any one class does not benefit another class. As far as I know, no one has seriously urged that resources are highly immobile in this sense. If we think of the wealthier groups as the upper third of income recipients, their demands are obviously highly competitive with those of people in lower income brackets.

Some good arguments may be discovered for preferring low to higher tax yields of equivalent deflationary effect but advocates of this point of view have as yet failed to find them. Therefore to claim that taxation should be made less progressive to obtain a sufficient deflationary effect is bad economics as well as bad ethics.

IV

The conflict between equity goals and high levels of investment cannot be so easily resolved. The income effect of taxes must occasion a reduction of consumption and investment expenditures, hoards, or private ownership of claims or old real assets. The more progressive a tax system becomes, the more it constrains the wealthier groups as it relieves lower income groups. Usually we describe this effect in terms of saving. A shift to a more progressive tax system of given yield supposedly reduces aggregate saving. Great care, however, must be taken in interpreting such a generalization. If by saving we mean the difference between a person's net income and his simultaneous consumption expenditures, it is not true that a more progressive tax system reduces the aggregate amount of saving. On the contrary, saving cannot be directly changed by taxation at all. This follows because saving thus defined must necessarily equal net investment. There is no need, I trust, to attempt to prove once again this necessary equality. It is sufficient to note that the equality of investment and saving holds for any distribution of income. For some reason, even ardent Keynesians seem to forget this fact when discussing taxation.⁷

A progressive income tax does something to wealthier groups in addition to curtailing their consumption expenditures and we need a concept to describe this fact. D. H. Robertson has provided us with one; namely, the difference between a person's past period income and his present expenditures upon consumption. To avoid giving different concepts the same label, I shall call this difference "thrifting."⁸ Progressive taxation does reduce aggregate thrifting more than proportional taxes of the same yield. Both ordinary observation and systematic empirical studies suggest that the higher the income scale the greater is the thrifting. Heavier taxation of the wealthier groups forces them to economize on thrifting as compared with consumption. Only one further step is needed to show that progressive taxation reduces investment; namely, that a reduction of thrifting will, *ceteris paribus*, reduce investment. This places us right in the middle of the persistent controversy concerning the determinants of the levels of security prices and of the rate of net investment. The thrift approach used here employs the uncomplicated argument that the less people thrift, the lower is their demand for securities; and the lower their demand for securities, the fewer will be the dollars which potential real investors can obtain by offering securities for sale.

Before taking this step, it may be wise to consider Keynesian

⁷ Cf. A. P. Lerner, *Economics of Control*, p. 235.

⁸ This is Robertson's term. Cf. his "Mr. Keynes and the Rate of Interest," reprinted in the *Readings in the Theory of Income Distribution*, pp. 430 and 439.

theories on this point, since they continue to exert some influence on current thought. According to this system of ideas, investment demands depend upon the marginal efficiency of investment and the level and pattern of interest rates. A shift toward more progressive taxation could decrease investment either by shifting the marginal efficiency schedule downward or by increasing interest rates. Whether the efficiency schedule shifts downward as a result of more progressive taxation is one of the unsettled questions among Keynesians.⁹ Aside from incentive considerations, if progressive taxes are to restrict investment, they can do so, according to this view, only by increasing interest rates. In turn, this can happen only if the money supply is restricted or if liquidity schedules shift upward. The possibility of decreasing the quantity of money may be dismissed by maintaining the comparison between a less and a more progressive tax system of the same yield. This leaves only liquidity preference. There appears to be no compelling reason for supposing that people would prefer to hold more cash as a result of a change from a less to a more progressive tax system of the same yield. On Keynesian grounds, therefore, no adequate reason has been discovered for believing that more progressive taxation must reduce the level of money demands for new real assets, except that anticipation of future taxes may reduce the marginal efficiency schedule. On this point, as earlier mentioned, there is no settled Keynesian position.

The usual Keynesian procedure analyzes the effects of a shift to more progressive taxation through its effects on the propensity to consume. More progressive taxation raises the schedule, and with respect to any given volume of investment, increases aggregate consumption expenditures. This inflationary development will, in a full employment setting, reduce the proportion of real resources devoted to supplying investment demands and increase that supplying consumption demands. If an adequate or excessive level of total demands for output has already been achieved, a shift to more progressive tax devices results in price inflation. This line of thought may be the reason, and I think it is, why those wedded to Keynesian patterns of thought are commonly found opposing a shift to more progressive tax devices in periods of

⁹L. Klein argues that as long as rates are less than 100 per cent, there can be no effect on investment incentives. (*The Keynesian Revolution*, pp. 171-172.) Domar and Musgrave develop a highly ingenious argument demonstrating that a proportional tax with full loss offsets does not deter risky investment. (Cf. E. D. Domar and R. A. Musgrave, "Proportional Income Taxation and Risk-taking," *Quarterly Journal of Economics*, May, 1944, pp. 388-422.) But the Keynesian concept of the marginal efficiency of investment presupposes that people would invest less at lower than at higher net rates of return. Hence an increase in effective tax rates should lower the schedule.

inflationary pressure.¹⁰ The approach provides no adequate method of acknowledging the direct deflationary effect of taxes on the financing of investment. If, in addition, one accepts the currently fashionable opinion that investment is insensitive to variations in security prices, any possible direct effect of present tax yields on the ability of business and persons to finance real investment is effectively assumed away.

Yet, in my opinion, this conclusion is more a criticism of Keynesian theory than of the view, widely held by practical people, that progressive taxation imposes more of an obstacle to investment than proportional taxation of the same yield. Potential real investors who are themselves more heavily taxed must economize, regardless of incentives, on self-financed investment. Likewise, those private groups who are more heavily taxed will economize in part on their purchase of securities. A reduction in thrift must either reduce idle balances or net acquisition of claims, thereby reducing the ability of real investors to tap private sources for cash. This deflationary effect of taxation on investment demands may be offset by other sources of financing, to be sure, but it does not disappear.

Two agencies exist whose activities may offset adverse effects of taxation on the financing of investment—the banking system and the government itself. Government may finance private investment through its own lending agencies or indirectly by buying its own debt. Debt repayment finances private investment to the extent that debt holders treat private securities as substitutes for public securities.¹¹ Likewise, the banking system may and does finance private investment independently and can thereby offset or more than offset the adverse effects of more progressive tax devices upon the rate of investment. As long as these practices prevail, the full effects of progressive taxation on investment financing may only infrequently operate.

These offsetting procedures raise a number of policy issues which cannot be properly explored here. It may be noted, however, that taxpayers do stand to gain when the offsetting procedure occurs by a reduction in net government debt, whether or not it is accompanied by a budget surplus on current account, because lower interest payments permit the reduction of future taxes or alternatively do not require as

¹⁰ It may also explain the cavalier treatment given President Truman's 1948 tax proposals by many economists.

¹¹ If debt holders treat cash as the only effective substitute for government debt in the sense of interest-yielding obligations, such debt contracts have no social functions. There is no reason for a government to reward people for not holding money. There is a justification for paying people to hold debt instead of real things. Neglect of this point is the weakness of the otherwise cogent argument advanced by Jesse Burkhead ("Full Employment and Interest-Free Borrowing," *Southern Economic Journal*, July, 1947, pp. 1-13) that interest payments on government debt are socially equivalent to subsidies.

high a level of future taxation. If private banks do the financing, the banks together with the real investor take title to the new wealth, leaving taxpayers with whatever comfort they may get from contemplating their receipted tax bills. The justice of requiring taxpayers, even wealthy ones, to offset bank financed private investment as well as government expenditures would be a worth while question to pursue if time permitted.

The hard choice between equity and progress by investment occurs when government debt and banking policy provide little or no offsetting effect. In such a setting, the greater the reduction in inequalities of personal economic power through taxation, the smaller will be investment. But even under these circumstances, there is no objection to curtailing investment by taxation unless investment is forced below its optimum level. This raises the awkward question: what shall we mean by an "optimum rate of net investment"?

An investment optimum might be defined solely in terms of the attainment of some "proper level" of total expenditures on current output when "proper level" is defined in terms of such goals as price stability, full employment, maximum production, or some combination of these. But this definition is unsatisfactory. There are an indefinite number of combinations of private consumption and investment expenditures consistent with any particular amount of aggregate expenditures desired. Thus other criteria must be sought.

Conceptions of an optimum have been developed in welfare economics. Optimum allocation of resources may be defined as a setting where no shift of resources would make any person better off, judged in terms of his own desires, without making others worse off. In the absence of such a possibility, optimum allocation may be further defined by the conditions (1) that each person makes his best choices and (2) that resources are allocated in such a way that product prices, including implicit prices, are everywhere proportional to marginal costs. Such a conception of optimum allocation of resources has, however, only a limited application to the determination of the proper rate of investment. Ideal resource allocation presupposes that the distribution of relative personal economic power is taken as given; it is an efficiency rather than an ethical test. It also presupposes that personal decision as exhibited in dollar votes cast is also taken as given. Accepting these same postulates, we may define optimum aggregate net investment in the old-fashioned but nevertheless defensible manner as the amount which equals the current rate of net thrifting. People by thrifting vote to hold more assets. Their desires will be thwarted unless their votes are implemented by equivalent investment decisions. This implementa-

tion, to the extent that it does not take care of itself, can be reinforced by government or bank action to finance private investment or by direct investment by the government itself. This test is also applicable, it may be noted, to socialism, as F. J. Atkinson has demonstrated.¹² Like other theoretical tests in economics, the goal of equality between net thrift and net investment would be difficult to apply in practice, but the principle is clear. Therefore there can be no valid economic objection to progressive taxation on the grounds that it induces a smaller volume of investment than private decisions would warrant, judged purely from the financing aspect. Such objections, if they are valid at all, must rest on the alleged distorting effect of more progressive taxation on incentives to invest, or on considerations outside of economics as it is ordinarily conceived.

This brings us to the dominant theoretical objection to progressive taxation on economic grounds alone; namely, that such taxes distort resource allocation. Thus an income tax allegedly distorts allocation of human resources between leisure and explicit money earning pursuits.¹³ A similar argument may be made with reference to investment, although here we are dealing with demands rather than with supplies of resources for alternative uses. A progressive income tax system distorts demands for investment items by favoring holding money rather than securities or real assets. This is another application of the "leisure" argument. Because the implicit gain of idle balances goes untaxed, the "price" of this type of gain is lowered, inducing people to prefer cash to earning assets. This distortion could theoretically be corrected by including the implicit gain of idle balances in the tax base, but even in the absence of such measures, monetary policy can offset tax-induced hoarding by substituting bank finance for personal finance. This type of objection is not therefore a serious one.

Likewise, progressive taxation may affect the pattern of investment demands, because gains, if there are gains, are taxed at higher effective

¹² F. J. Atkinson, "Saving and Investment in a Socialist State," *Review of Economic Studies*, 1947-48, pp. 78-83. His position is correct only if saving is defined in the lag sense. The equality of simultaneous saving and investment is automatic.

¹³ Cf. Duncan Black, *The Incidence of Income Taxes* (London, 1939), pp. 157-167; also H. P. Wald, "The Classical Indictment of Indirect Taxation," *Quarterly Journal of Economics*, August, 1945, pp. 577-596. The distortion argument should be viewed in terms of taxed versus exempt gain. Leisure is but a special case of such exempt gain. The usual "leisure objection" to progressive taxation assumes that the tax reduces the real income position of the taxpayer; i.e., places him on a lower indifference schedule, even aside from any announcement effects. This is incorrect. In their yield features, taxes are income redistribution devices. They make some worse off and some better off but need not make the group on balance worse off. The argument is further deficient because it assumes that distortion of resource allocation is equivalent to a departure from ideal allocation. This follows if ideal allocation would prevail in the absence of taxation, but does not necessarily follow otherwise. Taxes may improve as well as worsen resource allocation.

rates than the rates at which losses are subsidized by tax rebates or reduction of taxes on other income. Thus some bias may be created against what investors regard as "risky" investments.

This type of objection to progressive tax devices on economic grounds presupposes that the pattern of investment demands, conceived as they would be if the same tax yield were collected by means of proportional or regressive tax devices, is superior to what actually emerges under a progressive tax system. Thus far, economic investigation has provided no norm to justify such a judgment. Welfare economics has largely ignored the question. The usual contention that a progressive capitalism requires an abundance of risky investment may or may not be true, assuming that such a proposition can be sensibly defined. But showing that a tax distorts something does not damn it; one must also demonstrate that the distortion results in a worse rather than a better situation. On this question, I must confess a skepticism that we shall be able to develop economic norms to show that a tax-created bias against so-called "risky" investment results in a potentially smaller increase in future living standards. The outcome of investment decisions regarded as relatively risky or safe cannot be foretold in advance.

The alleged discriminatory effect of progressive taxation on the pattern of investment demands is traceable to high marginal rates and to loopholes in the administrative definition of the tax base. Both opponents and supporters of progressive taxation have a common interest in eliminating the loopholes. Their presence provides an added incentive to place wealth in a form where the gain is less heavily taxed, and this incentive to escape taxation alters the pattern of investment demands. The more complete the administrative definition of gain in the case of income taxation, the less the incentive a taxpayer has to alter his decisions as to the kind of assets he wishes to hold. It remains true that a progressive rate schedule exerts some bias against risky investment. Even this bias might be largely eliminated if, instead of income taxation, we employ net worth taxation to the groups in the upper end of the wealth scale.¹⁴

V

Thus on strictly economic grounds, objections to progressive tax devices are not especially formidable. The deflationary type of objection proves to be rather flimsy in nature. Its appeal arises from the habit of thinking of taxes in terms of effects on private consumption expenditures alone instead of upon all expenditures. Keynesian methods

¹⁴ Cf. William Vickrey, *Agenda For Progressive Taxation* (New York, 1947), pp. 362-366.

of thought are, I think, mainly responsible for the lack of attention to the constraining effects of taxation on thrifting and hence on investment. Originally, this school of thought apparently provided a defense for equalitarian measures, but as far as taxation is concerned, it is now headed in the opposite direction. Tax devices can succeed, however, in curtailing private investment as well as consumption demands even aside from incentive considerations.

There is, as a consequence, a possibility of conflict between equity goals in taxation and encouragement of investment. This conflict may be indefinitely postponed by a monetary and banking policy designed to offset the deflationary effects of taxes on investment. Such a policy itself presents some serious financial and long-run social complications. But if taxes are allowed to have their full effects on both consumption and investment expenditures, the strictly economic objections to equity tax devices are reduced mainly to the incentive argument—especially that progressive taxation distorts investment. We have seen that it is definitely not valid to oppose equity tax measures on the grounds that they force aggregate investment below an economic optimum. On the contrary, the free exercise of personal choice with regard to thrifting and investment can be made consistent with any distribution of economic power.

The conflict between equity and efficiency goals emerges, therefore, at a different, perhaps one should say a higher, level of social aims. From the point of view of achieving rapid increases in potential living standards, placating the demands of many powerful pressure groups, and increasing the economic power of a people to pursue expensive international policies, high rates of present investment are clearly desirable. These goals are partially thwarted by progressive taxation. Practical application of progressive fiscal devices also can achieve highly desirable ends. They reduce present economic inequalities and also alter the long-run structure of social groups, depending upon how universally and vigorously progressive fiscal devices are employed. The achievement of equity goals requires more than the mere lopping off of part of the income of wealthier groups; it requires as well systematic progressive negative taxation, i.e., subsidies, to the lowest income groups. Thus far, public policy has only been stumbling in this direction. Truly systematic devices to raise the economic power of the poorest groups are yet to obtain practical consideration. If such systematic positive and negative progressive taxation were inaugurated, extremes of wealth and poverty would be cumulatively reduced. The ethical case for this objective has all the force of equity ideals behind it. In addition, the efficiency case for raising the economic position of the very poor should not be lightly dismissed. The presence of

such groups acts as a drag on the entire society. In part the choice must be made between taking more of our new wealth in the form of buildings and equipment or more in the form of a more efficient people. If I read the signs of the times correctly, aspirations in this epoch of social history call for more rapid progress in the direction of eliminating extreme poverty. More progressive taxation is indispensable to such a goal.

DISCUSSION

O. H. BROWNLEE: While one may not agree with the conclusions of Mr. Rolph's analysis, it must be agreed that his reformulation of the problem of "Equity versus Efficiency in Federal Tax Policy" rescues the concept of tax efficiency from the narrows of costs of tax collections into which it frequently falls in discussions of tax policy and highlights the effects of tax policy upon the two most important economic variables in the social welfare function; namely, the distribution of income (equity) and the size of the total income to be distributed (efficiency). Determination of the best combination of these two variables necessitates knowledge of what combinations are possible; i.e., how the possibilities are affected by government's tax and expenditure policy and how various combinations are ordered in the preference system of the community. Mr. Rolph's conclusions are largely the result of his own preferences or of his judgments as to what the preferences of society ought to be, combined with casual empirical statements about the nature of the possibilities. Basing evaluation upon one's own preferences probably cannot be avoided, since a unique preference system for the community does not exist, and the decisive preference system will depend upon the group capable of forcing a political decision. However, additional information on the possibilities should be attainable, and it is upon the nature of these possibilities that my comments are directed.

First, a word about the "straw man" of maximum deflationary effect upon total money expenditure for goods and services per dollar of tax revenue. The straw man is adequately mutilated by Mr. Rolph, but there is a real question as to whether he should have been constructed. Minimum tax collections per dollar of government expenditure, without specifying the kinds of taxes to be levied, could not be seriously considered as an objective of tax policy. The amount of taxes to be collected is itself a variable which need not be economized. If one level of tax collections is not sufficiently deflationary, there is another higher level which is. Maximizing the deflationary impact of a given amount of taxes—or minimizing the amount of tax collected in order to provide a given deflationary impact—would conflict with concepts of equity, as has been demonstrated by Mr. Rolph. It would also conflict with attainment of maximum product subject to virtually any specified income distribution. Furthermore, it is not related to any fundamental objective of economic policy and can at best be considered only a pseudo objective which probably would be abandoned if attained.

The conflict between size of product to be distributed and way in which this product is divided among the members of the economy is a fundamental one. Mr. Rolph's discussion of this conflict as it affects the growth of product over time through the relationship between income distribution and saving is difficult to interpret. I understand Rolph's description of the economic system to be as follows: equilibrium in the commodity market exists when savings equal investment, and a shift in the savings schedule will not affect the equilibrium level of savings unless investment is altered; investment is de-

pendent upon the rate of interest; any level of the rate of interest can be achieved by appropriate action upon the supply of money; consequently, if investment and savings fall as a result of a change in the tax system, it is because the appropriate change in the supply of money has not been made.

If we accept Rolph's assumptions about the nature of the savings, investment, and liquidity preference functions, his conclusion—that saving need not fall if the appropriate monetary action is followed—does not automatically follow. With no change in the investment function, a shift downward in the savings schedule can result in no change in the equilibrium level of savings and investment only if national income is increased. With resources fully employed, an increase in real income is (by definition) impossible regardless of what monetary measures are employed. Thus we must choose between various combinations of consumption and investment because total real output is restricted by available resources and techniques rather than because government does not always follow the appropriate monetary policy.

These errors in the theoretical formulation of the problem lead to errors in description of the possibilities available with progressive income taxation. Although precise quantitative estimates are not quoted because they are not available, it is my guess that Rolph has underestimated the sacrifices in product which would have to be made to achieve increased equality in the distribution of income, using the progressive income tax as the principal redistributive device. Other errors in choosing policies can arise from not fully considering available techniques for redistributing income. Although it is not entirely clear as to what Rolph defines as progressive taxation, I am assuming that the emphasis is largely upon redistributing income, taking the pattern of resource ownership as given.

In the tax field, the principal class of means for redistributing resources is death taxation—inheritance and estate taxes. While employing such taxes as means for increasing the degree of equality in the distribution of income also may involve sacrifices of total product to be distributed, it is generally expected that such sacrifices will be smaller than if income taxation is employed to redistribute the product, leaving the ownership pattern of resources unchanged. This expectation of smaller sacrifices in total product to be distributed from the use of death taxation grows out of the belief that individuals' actions are less likely to be changed as a result of altering what happens to their heirs than if their current choices are altered.

Redistribution focused largely upon equalizing the terms on which individuals begin the race (equalizing opportunity) rather than requiring that they finish together may not result in the degree of equality which is desired by Rolph. But going much farther than this may involve costs (sacrifices of product) which would be considered undesirable by most members of our society.

LOUIS SHERE: I shall confine my comments to the subject treated by Professor Keith.

The transfer tax applies to the wealthy, yet it is the hobo of the American revenue system; its base is in shreds. The explanation for the lowly state of

the transfer tax, for its failure to rise to its revenue, equity, and economic potentialities, is to be found not in any lack of technical competence among economists and lawyers to deal with all sorts of refractory problems but rather in the hitherto complete failure to define alternative objectives and test them in the crucible of public discussion. A clarification of objectives, I take it, is the purpose of this program.

As I see it, a transfer of wealth should be the occasion for three separate and distinct tax moves: (1) the unfinished business in the transferor's income account with respect to the income from the property transferred should be completed; (2) a tax should be levied on the transferor's power or right to transmit property to the persons of his choice; and (3) the income of the transferee should be raised for the year of acquisition by the value of the property received.

If the Constitution now prohibits federal taxation of unrealized income (or even of imputed income where none is realizable under present concepts) and prevents the taxation of property as income, then it should be amended to permit such widening of the scope of the income tax.

The essence of my suggestion is that a substantial part of the transfer tax be taken over by a broadened income tax to permit a better alignment of the over-all tax system in terms of taxpaying capacities than can be achieved when the transfer taxes are treated wholly as impersonal lump sum property taxes.

In this connection I believe also that the future of the annual property tax is intimately tied up with the possibilities of achieving a more harmonious relationship between it and the personal income tax. The accounting of cash and imputed income of property under a supplementary progressive personal income tax instead of the antiquated assessment of the full value of the property to the holder, irrespective of equity, would transform the property tax from relatively inequitable to an equitable component of the American tax system. Also, in this direction lies the best hope for the solution of existing defects in property tax compliance and administration. The enormous administrative resources of the federal government, co-operating with state and local governments to assess property on an income basis, would in time enormously improve the administration of the income tax as well as the property tax. Proper integration of the income and property taxes may constitute the only satisfactory means of solving the tax problems of state and local governments. These taxes can be left unco-ordinated only if we are satisfied, without reference to public policy objectives, to have income from some property in effect taxed unduly and the income from other property taxed not at all under the combination of the two taxes; and only if we are satisfied to risk the spread of the present demoralization in compliance and administration from the property tax into the income and other taxes. Continued indulgence in the occult property tax administrative practices little becomes either modern fiscal requirements or proclaimed sophistication. Perhaps necessity will soon mother the fiscal inventions to improve both the annual and lump sum property taxes.

I shall now explain very briefly each of the three elements in the plan suggested:

1. Completing the transferor's income account with respect to the property transferred during life or at death involves determination of capital gain or loss accrued on the property to point of transfer and adjustments of his income tax returns. If a capital gains tax results, the tax but not the property should be deducted from the transfer tax base. The accrued interest on life insurance policies could properly be taxed at this point since this income had not been taxed to the transferor currently during his life. In addition, the transfer tax base should be differentiated by type of asset to allow for the fact that some assets more than others were able to escape from full accounting of income tax. This is done by varying the percentages of valuation included in the transfer tax base. Thus art treasures, jewels, hobby farms, and noncash income yielding investments and even substandard cash income yielding investments (with appropriate exceptions arrived at as result of carefully appraised policies) might be included at a higher percentage than investments in corporate equities or in unincorporated business enterprise. There is some overlap of the suggestion to square the capital gain and loss account and to differentiate the assets by rate of return from the investment, but I do not view this as significant for practical purposes.

2. The transfer tax on the transferor should remain in the nature of a lump sum property tax levied on the right to transmit property. The objective here is to tax the transfer of the same amounts of property alike, regardless of whether the property is transmitted during life or at death. This requires an integrated transfer tax system along the lines of the present gift tax, with the gifts cumulated on the transferor and the transfer at death treated as the last increment. The plan would follow that worked out by the Advisory Committee to the Treasury Department in its 1947 report with a few important modifications as to detail: the gift taxes should be included in the base; the cumulation should date back to 1932 for both the transfers during life and at death; life estates should be fully taxable to the life tenant; the annual exclusions should be restricted to administratively necessary amounts per donee but there should be no additional per donor allowance; and the exemptions should be reserved for exclusive application to the transfer at death but converted into something like an immediate annuity with the underlying property escheating to the government upon death of the beneficiary and perhaps upon marriage of the spouse, or the attainment of majority of children. Such exemptions would differentiate according to the age of the beneficiary but this has no relationship to the unacceptable principle of age difference graduation. No exemptions should be allowed with respect to collateral heirs, distant relatives, or strangers.

3. The transfer tax on the transferee should be integrated with the income tax. The receipt of property changes the transferee's economic status and in principle the property should be treated as income in the same manner as any appreciation in the value of his assets; that is, under the capital gains provisions. Cumulation on the transferee does not constitute a justifiable procedure in principle any more than would the cumulation of annually realized capital gains, and would be essential, practically, only if there were no cumulation on the transferor under the integrated transferor's tax. An accessions tax

which cumulates upon the transferee represents an unacceptable approach to the transfer tax problem.

Another golden calf which the suggested plan would melt down is the principle of age difference graduation of transfer taxes. It is based exclusively upon property tax or *in rem* tax concepts, whereas the objective should be to depart from such concepts as far as practicable and to apply the transfer tax in large part with an eye on the relative economic position of the current owners of wealth and recipients of income. It requires little persuasive argumentation to be convinced that from an economic viewpoint it makes little difference to the transferee whether he derived his wealth from his old grandmother, a middle-aged aunt, or a young divorcee. His current prospective economic position relative to others is affected by the size of his wealth and income, not by the age difference between the transferor and transferee. For similar reasons the Rignano principle is also unacceptable as a basis of transfer tax reform.

Apart from correlation problems, the most serious practical problem in the transfer tax field is the payment problem which has been neglected with impunity in the past because of the weakness of the transfer tax system. If the transfer taxes were raised from their present ineffective level to a substantial proportion of the wealth transferred now, I believe techniques to handle this technical problem would be required.

RICHARD E. SLITOR: Professor Seltzer has presented a skillful and objective survey of the conflicting considerations involved in alternative approaches to capital gains taxation. In a field where most of the literature is polemic or addressed to a narrow group of technicians, his paper makes a substantial contribution for the economist interested in reviewing the capital gains problem in its broad economic context. While he reaches no definite conclusions or philosophy of capital gains taxation, it may be judged that Professor Seltzer is not to be numbered among those who believe that not a detail of the present treatment could be changed without improving it.

The theme of unresolved conflict as applied to the capital gain and loss treatment is widely accepted, and for this reason these provisions have been considered tentative and impermanent in a special sense not applicable to other parts of the tax structure. I am inclined to believe that this point has been overstressed, both on the record of frequency of change and on the merits. Vacillation and continuous adjustment are characteristic of the history of many vital tax provisions, particularly those with multiple structural features. The clash between considerations of equity and economic effect is pervasive throughout the revenue system, including such basic elements as the structure of progressive rates. I would contend, therefore, that it is out of perspective to regard the capital gains provisions as particularly makeshift, pending the time when economic science may resolve (which it is inherently not equipped to do) the basic conflicts, involving value judgments respecting the relative importance of an affront to equity standards as against increased production, greater capital fluidity, or other desired economic results or respecting the nature of the economic society in which we are to live.

To supplement Professor Seltzer's analysis with a few highlights on the capital gains problem, the structure of the capital gains tax consists of three major elements: (1) the rate of tax, including the percentage of gain taken into account and the effective rate limitation, (2) the holding period, and (3) the offset of losses. The rate of tax, now ranging between 8.3 per cent and 25 per cent for taxable individuals, has been attacked on both sides. On one hand it is held to be too high and inimical to the flow of capital through the capital markets into business and from one business to another. On the other it is said to be too low in relation to the rates applicable to other sources of income and has stimulated various avoidance devices designed to transmute ordinary income into capital gains for tax purposes. Recently, the low rate of capital gains tax has been criticized as a factor encouraging economic concentration, on the grounds that it tempts the small business owner to sell out subject to the preferential tax treatment and that some groups of investors systematically rehabilitate or develop small businesses with a view to capital gains on resale, usually to a larger competitor.

The present six-months holding period for long-term gains cannot well be supported by the averaging rationale, which would require at least a one-year holding period. In addition, the relatively short holding period facilitates various devices to convert dividends into capital gains and to carry short-run speculative gains over the six-months dividing line.

The present segregation of capital losses, except for limited amounts, from ordinary income represents a compromise with equity and incentives to prevent a systematic and possibly large-scale raid on the revenues. The record of experimentation seems to indicate that this particular conflict has been substantially resolved for practical purposes and the present type of limitation represents a relatively firm equilibrium, with some possible room for liberalization of loss offsets in the interest of the ordinary investor. Many investors normally have substantial security holdings purchased above current prices, which it would be within their discretion to sell while holding on to their gains in order to reduce current tax liability. This consideration tends to override claims for the reintroduction of symmetrical treatment of capital gains and losses. The limitation on the loss offset may even have become a governing factor in the capital gains tax rate; since income taxation without loss offset means a higher effective rate of tax, one method of compensation is to reduce the nominal rate.

Whether or not capital gains are full-fledged income depends largely on one's frame of reference. Given the generally applicable income concept, capital gains fall neatly into the general pattern. The trouble is that income tax systems in practice do not consistently follow a single pattern, such as the economic concept, the pragmatic personal income concept advanced by the late Henry C. Simons, or the status concept. Hence, the problem of how to treat capital gains is the difficult one of appraising the particular blend of income concepts embodied in the tax system as a whole and determining which capital gains approach best ties in with the over-all pattern. Admittedly this problem would be simplified if it were feasible to differentiate among the wide variety of types of capital gains, ranging from the occasional gain

occurring as a by-product of normal investment transactions to those acquired by assiduous trading purely for capital gains. As Randolph Paul has said, the lamest excuse for not taxing capital gains is that we should emulate the British. Nevertheless, the British exemption of casual, as distinguished from capital, gains is consistent with the status concept of income, reflected in other principles of British income tax law such as the full taxation of annuities. Advocates of averaging for capital gains or general income appear to be striving in part to reduce fluctuating and irregular income patterns to their periodic equivalent, thus reconciling the economic and status concepts of income.

A number of questions are also raised by Professor Seltzer's treatment of the double taxation argument and so-called "illusory" gains and losses arising from variations in the interest rate.

Professor Seltzer cites the first as alleging that double taxation results if the gain and the subsequent yield derived from it are taxed. His reply is that this is irrelevant for purposes of a personal income tax and that capital gains recipients are no different from other savers whose saved income and subsequent yield therefrom are both subject to tax. This gives the argument a Fisherian twist which makes it equally applicable to taxing reinvested earnings from any source, in which form it has been met by Crum, Musgrave, and others. As I interpret the double taxation argument, it is somewhat different and calls for a different reply. Under this interpretation, double taxation is held to occur if the capital gain and the discounted income which gives rise to the gain are successively taxed. The latter argument may be met on its own ground. An accounting analysis of the income and basis adjustments for both buyer and seller during a capital gains transaction and subsequent reinvestment of the proceeds will show that the income tax structure is effectively designed to eliminate such double taxation. For example, if a taxpayer sells a bond at a gain and subsequently repurchases the same or similar bond, he either decreases by the amount of the previous gain the discount which would otherwise be taxable as long-term capital gain at maturity of the bond or increases the premium which is amortizable against taxable income. The same type of basis adjustment is implicit in the treatment of owners of equity securities or other capital assets since the reinvestment of capital gain proceeds increases the basis for purposes of determining possible future gains or losses. In other words, taxation of capital gains has the effect of converting income into capital, consistent with the general principle that income which has once gone through the tax mill is not taxed again as income.

The claim that capital gains arising from changes in the rate of interest are illusory because they leave the investor's actual income unchanged receives cursory attention in Professor Seltzer's paper. This argument has much wider and more serious implications than at first glance would appear. All capital gains are traceable either to a change in the prospective income from an asset or its rate of capitalization. Consequently, all capital gains on fixed income securities, as well as a substantial part of those on equities and real properties, stem from a change in the relation between income and capital values which may be expressed as a change in the rate of discount either for risk or for the

time factor. The claim of illusoriness as applied to this wide class of gains therefore represents a frontal assault on the whole basis for capital gains taxation. In reality, the seller of a security on which the discount rate has declined has received an immediate increase in income. Amounts for which he would otherwise have had to wait or incur further risks have materialized as current income. The mechanics of the present method of basis determination are such as to incorporate such amounts into capital. Hence if they are not taxed when realized they are excluded from taxation in the future. It would represent an anomalous approach to taxation to disregard such gains when realized on the grounds that they are illusory, and then again exempt corresponding amounts of future receipts on the grounds that they are return of capital.

ECONOMIC POWER BLOCS AND AMERICAN CAPITALISM

POWER BLOCS AND THE FORMATION AND CONTENT OF ECONOMIC DECISIONS

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"A community which fails to preserve the discipline of competition exposes itself to the discipline of absolute authority."—Henry C. Simons.¹

I shall treat the significance of blocism in terms of its increasing and probable influence upon the bargaining transaction, since this is the end product of economic decision making and associated voluntary negotiation between legally free and supposedly equal parties, for the persistence of capitalism is contingent upon the persistence of the bargaining, as distinguished from the managerial and the rationing, transaction. Because extrapolatable concrete data are lacking, my analysis is largely speculative.

I

The outcome of a bargaining transaction between buyer (buyers) and seller (sellers) is controlled by two sets of determinants, one internal and situated within the transaction framework and the other external and situated outside it. The external set, consisting of the institutional structure of the society and reflecting its group composition, limits the range of action open to the bargaining parties. The internal set includes all the circumstances which, in the aggregate and given a specific set of external determinants, cause the exchange ratio issuing out of the bargaining process to be what it is.²

¹ *Journal of Political Economy*, 1944, p. 5.

² The classic treatment of the transaction is that of J. R. Commons, in his *Institutional Economics* (New York, 1936), Chs. 1-2, especially pp. 58 ff. "Transactions . . . are the alienation and acquisition, between individuals, of the rights of future ownership of physical things [or their services], as determined by the collective working rules of society." Bargaining transactions entail voluntary agreement between legal equals whereas managerial and rationing transactions involve the issue of orders by superiors to inferiors. Bargaining transactions predominate in "free" societies; rationing and managerial in "unfree" societies. In all societies the transaction is a (usually temporary) harmony producing resolution of conflicts issuing out of economic scarcity (cf. my "The Problem of Order in Economic Affairs," *Southern Economic Journal*, 1948, pp. 1 ff.). Figure I (Appendix) may be used to illustrate internal and external determinants. Changes in D_s to S_s (or in the supply curve if it is upward sloping) reflect changes in the external determinants; e.g., if D_s shifted upward in consequence of the establishment of tariff protection. Changes affecting maneuverability between D_s and S_s reflect changes in the internal determinants; e.g., the conversion of simple competition into bilateral monopoly.

Corresponding to these two sets of determinants are two types of power potentially at the disposal of one or the other of the (individual or collective) parties to a bargaining transaction. One of these types may be called "economic power," the other "political power." Either or both of these forms of power may be resorted to by that party to a bargaining transaction who is bent upon making the outcome of the transaction process more favorable (at least in the shorter run) to him. The bargaining individual (or group) may be said to exercise economic power when he maneuvers within the framework of a given set of internal determinants to alter the terms of the transaction in his favor. The same individual (or group) may be said to exercise political power or something resembling it when he produces in the external set of determinants a change that makes it possible for him to obtain better terms than he would have obtained in the absence of this change. If one of the parties to a bargaining transaction becomes able to exercise a sufficient amount of political power, he may convert what has been a bargaining type of transaction into one that embodies much of the authoritative superior-inferior relationship characteristic of rationing and managerial transactions.

While the political type of power is readily distinguishable at the analytical level from the economic type, the two types are not always sharply distinguishable at the substantial level. Difficulties respecting the attainment of a complete distinction at the substantial level are complicated, moreover, by the fact that possession of the capacity to exert one type of power almost invariably coincides with possession of capacity to exercise the other type, acquisition of one capacity usually greatly facilitating that of the other.

The effects which accompany the exercise of either of these types of power rarely are restricted to the participants in a transaction. These effects may be divided, therefore, into two categories, the participant-affecting and the nonparticipant-affecting, the former of which includes all effects of a transaction incident upon the transacting parties and the latter of which includes all effects incident upon individuals, or groups, not parties to the transaction and therefore describable as non-discretionary and forgotten parties. While the participant-affecting category of effects may make a transaction a matter of concern to the over-all association (or community), the nonparticipant-affecting category invariably makes the transaction a matter of such concern.

Frequently the acquisition of the capacity to exercise economic power is contingent upon the prior acquisition of the capacity to exert political power, since possession of the latter permits changes in juridic conditions conducive to the former. For example, suppose that a multiplicity of sellers, though confronted by a monopsonist, are unable, under

existing economic and/or juridic conditions, to unite themselves into a single unit. If these sellers secure the establishment of new juridic conditions which enable them to unite and act as a unit, they may be said to have exercised political power in order to equip themselves with economic power. Such a sequence of events has taken place in both the agricultural and the labor sectors of the American economy.

II

The term "politico-economic power bloc" designates any group of considerable significance in the nation's labor force that is able, through the exercise of political power, to modify in its favor either the external determinants of transactions involving its members or their capacity to maneuver advantageously within the framework provided by the internal determinants. While our main emphasis here is upon the exercise of political power, it follows from the bloc's being economically significant that it is potentially, if not actually, capable also of exercising economic power. The political power of such a bloc consists principally in its capacity to influence the content, the interpretation, and the administration of legislation affecting transactions. This capacity, while it is of diverse origin (e.g., use of propaganda, force, etc.) flows principally from one or both of two sources: (a) the bloc's giving the appearance of being able to marshal a sufficiently large number of voters in strategic areas; and (b) the fact that the bloc's leaders and spokesmen subscribe to essentially the same community of interests, attitudes, and beliefs as do a dominating number of those elected or chosen to fill legislative, administrative, and judicial posts.

The main sources of strength of a bloc are three in number: (a) a sufficiently large membership strategically distributed throughout the economy; (b) consciousness of kind, of belonging to a distinct and easily identifiable segment of the labor force, and of having economic interests which appear to be preponderantly alike for the whole membership; and (c) effectiveness of organization at top, intermediate, and subbloc (or local) levels. Consciousness of kind is the cement that binds the individual members together and conduces to their acceptance of discipline designed to further their presumably common interests. This subjective connecting agent operates with most force at the local or subbloc level and with least force at the all-inclusive national level, the individual members' awareness of their supposed interests diminishing with the breadth of the social context within which these interests are defined. Organization serves to mobilize and give direction to the relevant behavior of individual members, operating also to intensify their consciousness of kind. While organization is essential at all levels,

its importance is relatively greatest (in a modern state) at the all-inclusive national level and the intermediate levels (e.g., union international, trade association) whence subjective and objective guidance and support may be communicated to local levels in need thereof.

The rise of politico-economic power blocs has been accompanied by changes in the realm of economic decision making—by changes which serve to intensify such modifications as were associated with the prior introduction of monopoloid forms. In an economy dominated by simple competition, responsibility for the crucial economic decision—namely, “the selection of men to make decisions”—rests with the active entrepreneur or (when hired managers are used) with the owners of the resources invested in the enterprise, for upon these responsible individuals there is incident all of the economic uncertainty inherent in the economy except for that relatively small amount which cannot be channeled to these individuals by the prevailing network of contractual arrangements; and these individuals reap that reward which accompanies risk-bearing. In such an economy ultimate responsibility for the making of crucial and quasi-crucial decisions is widely diffused, despite its being centered in entrepreneurial hands; for comparatively many individuals found therein the answer to the description of entrepreneur and, while possessed only of the limited autonomy that simple competition allows the entrepreneur, are untrammelled in their decision making by the circumscribing and direction giving dictates of combinations of buyers and sellers. Responsibility for decision making, together with the content and formation of the decisions actually made, is not quite the same in an economy shot through with monopoloid forms and overriding combinations of buyers and/or sellers. In the latter the ultimate responsibility for decision making is concentrated in fewer hands, control over this process being relinquished to strategically situated minorities; political as distinguished from economic elements are given far more weight by decision makers; and the formation of decisions frequently becomes so bureaucratized as to take on the nature of a collective process instead of that of one dominated by individuals as such.³

III

Of the pressure groups presently operating at the political level in the United States, none is definable as a complete politico-economic power bloc. But there exist three loose alliances of subblobs which do

³ See F. H. Knight, *Risk, Uncertainty, and Profit* (Boston, 1921), Chs. 9-10; N. W. Chamberlain, *The Union Challenge to Management Control* (New York, 1948), and the important works by R. A. Gordon and P. E. Holden, *et al.*, there cited. On relevant sociological questions see R. Dubin, “Decision-Making by Management in Industrial Relations,” *American Journal of Sociology*, 1949, pp. 292 ff.; W. E. Moore, *Industrial Relations and the Social Order* (New York, 1946).

exhibit many of the characteristics of a politico-economic bloc: organized agriculture, organized business, and organized labor; and at least the last of these gives every promise of maturing into a full-bodied politico-economic bloc.*

Of these three alliances, organized agriculture has been the most effective so far at the political level, at least until recently. Lacking the economic power to suppress interfarm competition and thereby augment the capacity of farmers to maneuver within the framework set by the internal determinants of their transaction relations with their customers, organized agriculture utilized its latent political power to modify the external determinants of these relations, establish supra-competitive prices for a number of commodities, and maintain these prices through a combination of output-restricting and surplus-removing measures. Organized agriculture thus accomplished this increase in its economic power by initially mobilizing its political power and therewith obtaining sufficient control over the apparatus of the state to introduce and execute the requisite economic measures.

A number of circumstances facilitated this mobilization of political power: the size and the strategic distribution of the voting agricultural population; the widespread belief, re-enforced during the Great Depression, that the farmer had not had a "fair deal" and that agriculture requires special governmental treatment; the seeming simplicity and rough justice of the parity program, together with the neglect, until recently, of its critics convincingly to advance a workable alternative; the failure of the victimized urban consumers to counter the agricultural program effectively; and the skill with which agricultural leaders worked with crucial Congressional committees and compromised their differences respecting the inclusion and treatment of particular commodities. These circumstances were re-enforced, of course, by changes taking place in the nation's underlying value pattern.

Despite the past success of organized agriculture, it is less likely than labor or business to evolve into a full-fledged politico-economic power bloc. It is declining in absolute and relative magnitude, its potential membership having fallen from about 18 to around 13 per cent of the civilian labor force between October, 1940, and October, 1949. This fraction will decrease, under the impact of mechanization and the elimination of disguised unemployment, to a minimum of around 8-10 per cent; for in the agricultural sector, unlike in the labor sector,

* Consumer organizations are not definable as politico-economic power blocs because they are not organized around persisting and easily identifiable interests. Organizations such as those of the war veterans and the aged are not so definable inasmuch as their primary objective consists not in modifying transaction terms but in attaining free income at the expense of owners of labor and other forms of productive power.

prevention of labor displacement is not an important objective. The ideological heterogeneity of the farm population will tend to limit its political effectiveness; for laborers and tenants, comprising about one-half of the agricultural labor force, while less conservative and more disposed to collectivism than are farm owners, are less active politically and, presumably, less capable of pressing the income increasing objective of agriculture than are the owners. Moreover, agricultural aid flows principally to the well-to-do who are not in need of it. Urban opposition to continuation of the farm price-support program appears to be growing, while analysis of trends indicates that, in the absence of economic depression, even a competitive agriculture should prosper. It is now accepted that the frequency of absolutely and relatively low familial incomes in agricultural areas can be appreciably reduced only through the removal of the excess farm population. Respected experts are agreed that the basic desideratum is a reasonable stability of agricultural income; that parity pricing is unsuited to bring about either income stability or a welfare augmenting utilization of agricultural resources; and that agricultural price supports, insofar as they may be deemed necessary, should assume the form of forward prices instead of that of obsolete, backward facing parity prices. All these forces, acting in combination, will tend to undermine the designs of the Founding Fathers to conserve overriding political power in the hands of agriculturalists and their allies.

In view of these circumstances it is unlikely that blocism will increase materially in the agricultural sector, or that transaction relations obtaining between agriculture and its customers will be further modified, through the use of political power, in favor of the agricultural labor force. It is much more likely that under the impact of the rise of blocism in the business and/or labor sectors transaction relations will become less favorable to agriculture, with the burden of any accompanying adverse income changes falling principally upon agricultural rent.

The potential numerical strength of organized business is only about one-half that of organized labor.⁸ In the latter group may be placed all skilled, semiskilled, and unskilled laborers (exclusive of those engaged in agriculture), comprising approximately one-half the labor force; in

⁸ Estimates of the potential numerical strength of each bloc are based upon 1940 and post-1940 census data on occupational composition. On political and related attitudes see R. Centers, *The Psychology of Social Classes* (Princeton, 1949), especially Chs. 5-6, and (with H. Cantril) "Income Satisfaction and Income Aspiration," *Journal of Abnormal and Social Psychology*, 1946; also the writings of Talcott Parsons. Cleavages between "big" and "little" business and ideological sympathies between "little" business and agriculture are not explored. On the political behavior of various economic groups in the 1948 presidential election see S.S.R.C. report, *The Pre-Election Polls of 1948* (New York, 1949), especially Ch. 11 and pp. 357 ff.

the former, nonfarm proprietors, managers, and officials, together with most professional and semiprofessional workers, or slightly less than one-fifth of the labor force. If farm laborers are included with organized labor and farm proprietors with organized business, the potential numerical strength of the latter approximates one-fourth the labor force, and that of the former, slightly over five-ninths. The appropriate allocation of the white-collar workers (nearly one-fifth of the labor force) is not clear; for, while the interests of most such workers seem to be identified with labor rather than with business, a large fraction of this white-collar group is ideologically affiliated with business and presumably will continue so until the civic power and prestige of labor are greatly increased.⁶ For white-collar workers, like the members of the business and the professional groups, when contrasted with manual workers (the bulk of whom identify themselves as belonging to the working class rather than to the middle class), are less radical, less inclined to collectivism, more active politically, more satisfied with their income and employment situations, and more disposed to prefer opportunity for self-expression to "security." Yet, even if we allocate two-thirds of the white-collar workers to business and the remaining third to labor, the potential numerical strength of the latter still remains about double that of the former.

Until recently organized business, though describable at most as a loose coalition of various local, regional, and national associations of business leaders, was more powerful than organized labor, apparently making up in consciousness of kind and effective organization what it lacked in actual and potential numerical strength. Accordingly, it was able, prior to the thirties, to command enough legislative and administrative support to continue a legal milieu hospitable to commerce and industry, to maintain in large measure the strength of employers vis-à-vis labor, and to secure various types of legislation of supposed advantage to particular industries (e.g., tariff protection).⁷ Labor, meanwhile, was able to enroll in the union movement only a minor fraction either of the labor force or of the working class prior to the thirties. Union members comprised about 3 per cent of the labor force at the turn of the century and, if we except 1919-22, under 9 per cent prior to 1937; at present they form about one-fourth of the labor force and about one-third of the nonproprietor and nonprofessional component of the labor force. Unionism dominates the nonagricultural branches of

⁶ See C. W. Mills, *The New Men of Power* (New York, 1948), pp. 278 ff., and "The Middle Classes in Middle-Sized Cities," *American Sociological Review*, 1946, pp. 527 ff.

⁷ See R. A. Brady, *Business as a System of Power* (New York, 1943), Part III; C. D. Edwards, *Maintaining Competition* (New York, 1949); and D. Lynch, *The Concentration of Economic Power* (New York, 1946); also note 10 below. On the political role of business see C. W. Mills, "The American Business Elite: A Collective Portrait," *Journal of Economic History*, Sup. V, 1945, pp. 20 ff.

the economy up to the distributive level, and it has made some inroads even there. Its enlisting power has been strengthened, as have other of its powers, by the augmentation of the class consciousness of the working class issuing from: (a) the dissolution of craft practices and craft consciousness produced by the spread of mechanization; and (b) the decline in vertical social mobility occasioned by management's increasing disposition to draw its membership from among the educated instead of from among its own wage-earning employees.⁸ Unionism's organizing power has been strengthened by the affiliation of five-sixths of its membership with the C.I.O. and the A.F.L. and the enrollment of nearly all its remaining membership in strong national organizations.

Despite the comparative strength of organized business in the past, despite the progress of business firms in size, and despite the development of fewness⁹ and varying degrees of collusion, most business remained workably competitive, at least until recently, and exploitation of buyers and sellers was limited in scope. For the persistence of a large measure of competition many factors have been responsible. The Sherman and related acts have had the considerable negative effect of a fleet in being and the sizable positive effect that periodic prosecutions inevitably produce. Changing technology, shifting demands, and the multiplication of products have served, given sufficient time, to dilute much of the economic power that fewness and collusion temporarily give groups of firms over buyers and/or sellers. The same struggle for power that has generated bigness has operated also at intervals to weaken collusive arrangements. Bigness itself has often contributed to the prevention of some economic evils attributed to bigness. Large firms frequently can impose competitiveness upon their suppliers, and they can undertake the research that eventually will shift supply curves downward. With bigness, moreover, there is commonly associated both a highly rational approach to purchasing, production, and distribution problems, and a large measure of productive-power mobility. The former conduces to technological progress and to economy in the use of resources; the latter makes for high elasticity of potential supply in respect of particular products and thus reduces the number of suppliers requisite for the maintenance of workable competition, etc.¹⁰

⁸ On the status system of the modern community and the social system of the factory, see W. L. Warner *et al.*, *The Status System of a Modern Community* (New Haven, 1942), and *The Social System of the Modern Factory* (New Haven, 1947), Ch. 10; also Centers, *The Psychology . . .*, pp. 66, 72, 75, 101 ff., 210 ff., and R. K. Merton, *Social Theory and Social Structure* (Glencoe, 1949), pp. 320 ff.

⁹ See W. Fellner, *Competition Among the Few* (New York, 1949).

¹⁰ In *Five Lectures on Economic Problems* (London, 1949) G. Stigler presents an estimate to the effect that in 1939 "competitive industries" embraced more than four-fifths of the labor force, and he suggests that competition may have increased moderately since the turn of the century. See also M. A. Adelman, "Effective Competition and the Anti-trust Laws," *Harvard Law Review*, 1948, pp. 1289 ff.; E. S. Mason, "The Current Status of the Monop-

Although organized labor was not capable of exercising much political power until in the thirties, usually preferring to strive for economic rather than for political power, unionization gave members of trade unions a wage advantage over nonmembers as early as the nineties.¹¹ Whether unionism pushed wages above the competitive level or worsened the distribution of workers among occupations is not inferable, however, from the data at hand. The frequency with which disorderliness has characterized wage patterns, together with evidence of the operation of the employers' fear of spoiling the labor market, indicates the presence of less competition than the nonorganized workers' unassisted propensities would generate.¹² Moreover, until recently, except for some narrowing of the spread between maximum and minimum wage levels, wage structures manifested little disposition to change in either a more or a less competitive direction.¹³ For, in view of the ease with which most of the requirements of occupations can be mastered and in view of the supposed normality of the distribution of occupational aptitudes among the individuals composing a population so large as that attached to a typical industry, interindustry differences in wage structure and median wage should be quite small, as a rule, given simple competition. And yet these differences have long been pronounced and they still remain so.

Since the thirties labor's political power has increased tremendously for a number of reasons, in particular the capacity of top-level labor leaders, despite their ideological and organizational differences, to work together as if they constituted a coalition. This accession of political

only Problem in the United States," *ibid.*, 1949, pp. 1265 ff.; M. A. Adelman, "The A & P Case: A Study in Applied Economic Theory," *Quarterly Journal of Economics*, 1949, pp. 238 ff.; E. S. Mason *et al.*, "Various Views on the Monopoly Problem," *Review of Economic Statistics*, 1949, pp. 104 ff.; D. M. Keezer, ed., "The Antitrust Laws; a Symposium," *American Economic Review*, 1949, pp. 689 ff. For evidence that industrialization tends to decrease rather than increase the degree of market control exercised by sellers and/or buyers see M. R. Solomon, "The Market in Undeveloped Economies," *Quarterly Journal of Economics*, 1948, pp. 519-541. Cf. T. Veblen's interesting comments on the country town in his *Absentee Ownership and Business Enterprise in Recent Times* (New York, 1922), pp. 142 ff.

¹¹ See A. M. Ross, "The Influence of Unionism Upon Earnings," *Quarterly Journal of Economics*, 1948, pp. 263 ff., 787 ff., and *Trade Union Wage Policy* (Berkeley, 1948); also C. E. Lindblom, *Unions and Capitalism* (New Haven, 1949).

¹² For evidence of the underpayment of labor see W. R. MacLaurin and C. A. Myers, "Wages and the Movement of Factory Labor," *Quarterly Journal of Economics*, 1943, pp. 241 ff.; R. A. Lester, "Diversity in North-South Wage Differentials and in Wage Rates Within the South," *Southern Economic Journal*, 1946, pp. 238 ff., and "Wage Diversity and Its Theoretical Implications," *Review of Economic Statistics*, 1946, pp. 152 ff.; L. G. Reynolds, "Wage Differences in Local Labor Markets," *American Economic Review*, 1946, pp. 366 ff.

¹³ On wage structure changes see, e.g., S. Lebergott, "Wage Structures," *Review of Economic Statistics*, 1947, pp. 274 ff.; J. T. Dunlop, "A Review of Wage Policy," *ibid.*, pp. 154 ff.; H. Ober, "Occupational Wage-Differentials, 1907-1947," *Monthly Labor Review*, 1947, pp. 127 ff. Comparisons which I have made (using an appropriate index of inequality) of prewar and postwar wage rate dispersions in respect of their inequality indicates that it has diminished since the thirties.

power has been accompanied by that of economic power, which in effect is being mobilized on an ever wider terrain. Both forms of power have been and are being directed principally to the improvement of the economic situation of union members. Neither the enactment of the Taft-Hartley Act nor the periodic recourse to principle-lacking "fact-finding" boards has significantly affected the augmentation of labor's power.¹⁴

Today organized labor is capable of growing in strength rapidly, even without that governmental assistance which in the past has nourished it; while its power at the transaction level is greater than ever. Through its organizational instrument, the union, and through its almost untrammelled right to combine, strike, and exercise other monopoly creating powers, organized labor can now advance money wages faster than training, invention, innovation, and capital formation can increase output per worker. If Lindblom¹⁵ is to be believed, wage restraining forces have become almost inoperative. The employer's disposition to acquiesce in union wage demands is no longer greatly restrained as formerly by fear of heightened competition from lower wage paying rivals and industries, since bargaining now is increasingly conducted on what amounts usually to an industry-wide and, frequently, to a multi-industry basis; while it is strengthened by his fear that if he does not give in, the union will encroach upon his management prerogatives.¹⁶ Union demands are not appreciably restricted by the fear that prices will rise or that union members will be displaced by machinery or by nonunion and unemployed workers. For the membership of each union proceeds, as do tariff seekers, upon the supposition that it stands to gain more than it will lose, and that it certainly will lose through price rises elsewhere if it demands nothing; while the union, through the control which it now is able to exercise over the employer, can reap most of the fruits of mechanization for itself in the form of higher wages, just as it can prevent his hiring available unemployed and nonunion workers. It follows, if this analysis be valid, that a large part of the control over price movements has passed to organized labor and therewith the power necessary to transform labor into the paramount politico-economic bloc in the economy, given the

¹⁴ See P. A. Brinker, "The Taft-Hartley Act in Action," *Southern Economic Journal*, 1949, pp. 147 ff.; S. H. Slichter, "The Taft-Hartley Act," *Quarterly Journal of Economics*, 1949, pp. 1 ff. On shortcomings of fact-finding proposals see H. R. Northrup, "The Railway Labor Act and Labor Disputes," *American Economic Review*, 1946, especially pp. 340 ff. It should be added that while "fact-finding" boards tend in some measure to standardize "settlements," they disregard the welfare of third parties (i.e., the forgotten public), being unequipped with a framework of principles intended to guard the well-being of the entire population.

¹⁵ "The Union as a Monopoly," *ibid.*, 1948, pp. 671-697, and *Unions and Capitalism*.

¹⁶ See Neil Chamberlain, *op. cit.*, for a careful analysis of union penetration of management. See also G. A. Briefs, "Can Labor Sit in the Office?" *American Affairs*, Summer, 1948, Sup.

present legal and institutional framework. This inference is strengthened by the seeming predominance in management of what Pareto would call the fox type of leader and in labor of the lion type, for the fox is inclined to appease the lion at least so long as he believes that he can do it at someone else's expense. The foxlike disposition of the leaders of organized business is re-enforced by their increasing loss of moral certitude and support from intellectuals.

IV

Let us now examine the vectors being introduced into the American economy by the increasing concentration of politico-economic power in the hands of the labor bloc. Because of the recency of this power shift, our analysis of its implications is couched in terms that are more conjectural and static than one would prefer. Our analysis is based upon a twofold supposition: (a) that, even though a trade union is a multi-purpose organization animated by the diverse motives of a plurality of individuals, its overriding objective is the frequent increase of the income of its sometimes growing and sometimes restricted membership;¹⁷ (b) that this objective is sought through the employment of political and economic power to modify the internal and the external determinants of the employer-worker transaction-relation in favor of the latter.

1. Intra- and interindustrial combination will be stimulated. In recent times the scope of the bargaining unit formulating and (frequently) presenting the demands of labor has been steadily extended by the desire of the representatives of particular union groups to free themselves of competition and to obtain for their members comparatively similar terms from industrially diverse employers. Industry-wide bargaining is superseding plant- and firm-wide bargaining, while key bargaining and what amounts to multi-industry bargaining are now replacing industry-wide bargaining.¹⁸ Bargaining at industry-wide and multi-industry levels, in turn, generates in affected firms both the desire and the opportunity to co-operate with respect to price fixing and related matters; for these firms see in such co-operation the prospect of guarding themselves against discrimination and of recouping their continually expanding outlays for labor, and they may see in a union's virtual exemption from the antitrust laws the possibility of attaining

¹⁷ For diverse views regarding what, if anything, a union is trying to maximize, see Ross, *Trade Union Wage Policy*; J. T. Dunlop, *Wage Determination Under Trade Unions* (New York, 1944), Chs. 1-6; J. G. Turnbull, *Labor-Management Relations* (S.S.R.C. Bulletin 61, New York, 1949). This subject has been treated also by J. Shister and S. Slichter in papers cited by Turnbull.

¹⁸ J. T. Dunlop, "A Review . . ." *loc. cit.*, p. 158; also pp. 354 ff., in *Income, Employment and Public Policy* (A. H. Hansen Festschrift) (New York, 1948), believes wage rates follow 25-50 "key bargains" which are the foci of change whence wage adjustments are propagated. See also J. Shister, "The Locus of Union Control in Collection Bargaining," *Quarterly Journal of Economics*, 1946, pp. 513 ff.

prohibited monopolistic and/or monopsonistic objectives indirectly and through the instrumentation of the union. Of this we already have evidence.¹⁹

2. The polar outcome of the tendencies now under way would appear to be a society of bilateral monopolies exploited by labor under conditions that might entail each employer's acting as collecting agent for a union and taking from his customers the maximum which, in the absence of discriminatory pricing, they stand willing to pay for the (union members') labor embodied in the products marketed by the employer. As will be noted, however, this polar outcome will be prevented by effects accompanying the movement of the economy in that direction, the situation being somewhat similar to that obtaining in a world subject to spreading trade constriction. But even so, the allocative role of the price system will be severely circumscribed.

a) Any given union (or group of co-operating unions), by restricting appropriately the amounts of labor which firms composing an industry may hire, can fix that industry's output of goods at the bilateral monopoly level which will maximize the joint profit of the union and its industry employer, compatible with the employer's hiring that number of workers for whom the union seriously seeks employment. The union, furthermore, by including an all-or-none principle among those conditioning its providing the industry employer with labor, can fix wages at the highest level attainable by the number of workers for whom it demands employment, given the minima necessary (under the union's time horizon),²⁰ to insure the required supply of productive agents used jointly with labor. These minima can be further reduced through recourse by the bilateral monopoly to discriminatory or monopsonistic (or oligopsonistic) pricing when it purchases agents complementary to labor.²¹

b) Each union is commonly under a double impulse to extend its bilateral monopoly sway. (1) Since a union must protect itself against indirect competition occasioned by the availability of substitutes for goods which its members produce, it must (acting alone or jointly with other unions) bring the industries producing these substitutes

¹⁹ On a scheme to cartelize the coal industry through union assistance, see "Economic Power of Labor Organizations," *Hearings before Committee on Banking and Currency, United States Senate, 81st Cong., 1st sess., July-August, 1949*, pp. 492-497; on practices in other industries see *ibid.*, pp. 67 ff., 226 ff., 466 ff., 671, 779, and Mills, *Men of Power*, pp. 224-229. In this connection see also W. F. Brown and R. Cassady, Jr., "Guild Pricing in the Service Trades," *Quarterly Journal of Economics*, 1947, pp. 311 ff. On the exemption of labor from the antitrust laws, see Edwards, *op. cit.*, pp. 76-90; *Allen-Bradley Co. v. Local Union No. 3*, 325 U. S. 797 (1945) and *Giboney v. Empire Storage & Ice Co.*, 69 S. Ct. 684, 93 L. ed. 649 (1949).

²⁰ This minimum is a function of the union's time horizon, increasing with the length of that horizon.

²¹ See Appendix.

under the same bilateral monopoly control. (2) It must try to obtain comparable remuneration for those of its workers who are engaged in industries not in close competition with those described under "1," for otherwise the existence of relatively low wages for those of its members enrolled in these less monopolized (or exploited) industries may act as a drag upon wages in the monopolized industries.

Appraisal of a union's exploitative operations is complicated by the fact that its income objective usually is a compromise between maximization of the aggregate income of its employed members and maximization of their average wage. A union is most likely to emphasize the former if the winning of a wage advance threatens to displace enough workers who, attributing their unemployment to this advance, are likely to unite and force the employer to consider a lower wage offer. Since under prevailing circumstances such a conjuncture is rare, it is wage maximization that dominates union policy.²² Respecting this objective it may be said that, *ceteris paribus*, the lower the wage being received relative to wages deemed comparable, the greater the relative increase that appears consistent with equity and susceptible of attainment.

3. A union, whether or not it has established a complete bilateral monopoly situation, will take additional steps to protect itself against the effects of labor or commodity competition; e.g., control the introduction of machinery and the employment of nonunion or unemployed workers; prevent organization of nonunion members into a lower wage offering competing organization; secure through joint political action with other unions removal of partly or fully unemployed workers from the labor market through state-supported unemployment compensation and public works programs; establish local and regional monopolies (e.g., building, services); exclude mobile, lower-priced domestic or foreign products through tariffs, health regulations, transport controls, etc.; induce government to subsidize either labor dominated industries

²² E.g., see Lindblom, *Unions and Capitalism*, Chs. 6, 10. L. G. Reynolds, "Towards a Short-Run Theory of Wages," *American Economic Review*, 1948, pp. 289 ff. Two conditions govern the overtress of the influence exercised upon the volume of unemployment (complete, partial, or disguised) by the introduction of monopoly and/or a wage more supracompetitive than the one ruling formerly in an industry: (a) the rate at which, because of industrial and/or population expansion, the demand curve for labor is shifting upward through time; (b) the rate at which monopoly is being introduced into an industry, or the prevailing wage is being raised above the competitive level. Given an expanding economy, no visible unemployment need be occasioned, since if the wage is not advanced too rapidly, a union can obtain for its supposedly fixed number of members a wage that rises more and more above the competitive level. If the wage is adjusted upward at a rate reducing employment in an industry only by the amount (per year, say) that death, disability, and analogous forces reduce the labor force attached to that industry, no visible unemployment will develop therein. In sum, the fact that none of the labor force attached to an industry is unemployed is not proof that monopoly is not increasing therein or that the wage rate is not becoming increasingly too high. The unemployment occasioned by these measures may simply have been transferred elsewhere in the economy, there to assume the guise of full, partial, or disguised unemployment.

or their customers, so that their demand for labor rises (e.g., subsidies to various branches of the transportation industry).

4. Two effects will accompany the assembly of politico-economic power in labor's hands if, as seems inevitable, this power is employed to establish exploitable situations, whether bilateral monopolistic or less extreme in character. (a) Private capital formation will be checked since the usurpation of nonlabor income will diminish both the capacity and the will to save and/or invest. Innovation consequently will be adversely affected. (b) Prices will generally move upward, thereby diminishing the real value of all fixed-quantity claims. The appropriation by the union membership of the fruits of innovation will largely prevent their distribution to consumers as in the past. The pressure of labor for governmental support of diverse labor groups (e.g., workers on governmental projects, unemployed, etc.) will conduce to deficit financing, while labor's demands for greater wage increases than the economic system can tolerate will make for augmentation of the active money stock utilized in the private sector. The outcome of these two continuing pressures will be continuing money and price inflation.²³

5. The spread of bilateral monopoly (or of any less extreme form of exploitative arrangement) will encounter increasingly powerful obstacles—obstacles which in time will undermine both unionism and the exploitative arrangements it endeavors to establish. These obstacles have their origin, ultimately, in the limited productive capacity of the economy, in the differential susceptibility of industries to effective union organization and exploitation by labor, and in the growing number of victims of such exploitation. Accordingly, the final outcome of continued multi-union efforts to swell the aggregate income share of these members beyond a probably low tolerance limit will be a sufficient multiplication of victims of this policy to provide political strength wherewith to shear unionism of its abused power and to undermine a form of capitalism that through occasional failure to reduce prices and advance wages sufficiently helped bring unrestrained unionism into being.

Because a union's power, even under bilateral monopoly, to exact a "supracompetitive" wage varies inversely with the elasticity of its employer's demand for its labor,²⁴ a union is pressed to bring all closely

²³ Aspects of this problem have been treated in 1946-49 by M. W. Reder, H. W. Singer, O. W. Phelps, M. Friedman, W. Fellner, B. Higgins, G. Haberler, and S. H. Slichter.

²⁴ Industries are differentially susceptible of exploitation by labor through bilateral monopoly or related arrangements, either (a) because some industries (e.g., retailing) are harder to organize effectively, or (b) because some industries, though organized as effectively as others, are characterized by greater elasticities of demand for the labor employed therein, than are other industries: "a" is self-evident; "b" reduces the rate at which an industry can be bilaterally monopolized without occasioning undue repercussions. If conditions "a" and "b" are both present in an industry in some degree, it will be marked by relatively low wages, together with unemployment (complete, partial, and/or disguised).

competing industries under a single bilateral monopolistic control. If but one union pursues this policy, it can approximately maximize its income objective, since it gains more from the removal of competition than it loses through the associated decline in the economy's aggregate income, thereby illustrating the importance of an exploiter's not being too important. Yet not one but more and more unions will pursue this policy, with the result that any advantage initially won by some particular union tends eventually to be converted into a negative gain, the wage increasing effect eventually being swamped by price increasing and income reducing effects. For, independently of any adverse influence imputable to diminished private investment, the demand for the labor supplied by any particular union is reduced by: (a) increases in the prices (much of which consist of outlays for labor in other industries) of materials, etc., used jointly with labor supplied by that union; (b) decreases in an economy's aggregate real income consequent upon the spread of job restriction associated with the extension of bilateral monopoly and similar arrangements, since job restriction produces either partial and full unemployment or disguised unemployment (i.e., overemployment in governmental make-work jobs or in industries that are comparatively "unsheltered" and hard to monopolize).²⁵

Suppose two industries, *G* and *F*, each of which is competitive in all respects, with *G* employing labor supplied by union *g* and *F* employing labor supplied by union *f*. Suppose, further, that each industry is using *Q* labor at wage *R*, and that the derived elasticity of demand for labor at wage *R* is lower in *F* than in *G*. Now suppose that each industry is converted into a bilateral monopoly which the union proceeds to exploit. If each union reduces by one-third the amount of labor that it now supplies, the remaining two-thirds can command a higher wage in *F* than in *G*, with the result that the employed workers in *G* will be less satisfied than are those in *F*. Again, if each union fixes the new wage at *R'*, the raising of the wage from *R* to *R'* will displace more workers from employment in *G* than in *F*, with the result that there will be greater dissatisfaction in *G* than in *F*, and greater pressure from the displaced workers upon the benefited workers to reduce the wage below *R'*.

That the exploitability (let us call it *m*) of a bilateral monopoly by a union varies inversely with the elasticity of the monopoly's derived demand curve for the labor supplied by the union may be illustrated as follows in terms of Figure I. Suppose that each industry is supplied *Q*₁ labor by the union dominating it. The maximum attainable wage in industry I will then be *W*₁; in industry II, *W*₂. Had each monopoly been able to hire *Q*₁ labor at a wage equal to the value (in marginal revenue terms) to the monopoly of the *Q*₁th unit of labor, the wage would have been *W'*, which, in this instance, is the same as the wage *W* that would prevail if the industry hired *Q*₁ labor competitively. Since *W*₂ and *W*₁ each is an average value (call it *A*) to which a marginal value *W'* (call it *M*) corresponds, we may write $m = A/M - 1$. Now let *e* represent the elasticity of demand of each average curve at point-value *A*. Then $A = Ma$ where $a = e/e-1$; and $M = Ab$ where $b = 1-1/e$. Whence $m = Ma/Ab-1$. Accordingly, since, as *e* increases, *a* and *b* and *M/A* each approaches 1, *m* approaches zero. We have supposed that the average and the marginal values of the labor supply curve, being under union control, are equal. If this is not the case, and if the average supply curve for labor is a rising one, it may be shown by similar reasoning that the relative extent to which bilateral monopoly output falls below competitive output varies inversely with the elasticity of the average labor-supply curve.

²⁵ Consider any particular kind of labor. Under conditions of bilateral monopoly the quantity of it that will be taken at any given wage will behave, *ceteris paribus*, as follows: (a) diminish (increase) if the wages of substitute labor fall (rise); (b) rise (fall) if the wages of complementary labor and the prices of other complementary factors fall (rise);

V

Our analysis suggests that the power bloc most dominant in the American economy today is labor oriented; that its rise has modified the transaction pattern of the economy sharply in labor's favor; and that this increasing one-sidedness threatens to undermine both unionism and the only kind of economic system with which an at all powerful form of unionism is compatible; namely, free enterprise. Believing the role of economist badly served at the moment by panacea mongering, I propose no solutions. And finding as yet only dimly foreshadowed the solutions immanent in and being ground out by our essentially Hobbesian economy, I am unable to forecast the concrete form and substance that they will finally assume.

Consideration of the trends seemingly under way suggests, however, that contemporary unionism, though imposed upon labor by the sometimes feudal, sometimes guerrilla-like character of labor-management relations during the period of unionism's flowering, will not persist, being incompatible both with the developing value system and with the equity, continuity, and other requisites of an economy so interdependent, sensitive, roundabout, impersonal, and innocent-person affecting as is any modern economic society. Accordingly, unionism's presently great though transient power will be diluted, and the role of its principal organization, the union, will be brought into balance with those of other components of the politico-economic structure.

The dilution of unionism's power will be accomplished in one of three ways: (1) Should state socialism supersede contemporary or successor capitalism, the union will be socialized along with industry, and, though the transformation will require time, both will be subordinated to the state. (2) Should a corporate type of society succeed contemporary capitalism, upper levels of union officials will be absorbed into the managerial bureaucracy, while the increasingly bureaucratic character of union organizations, re-enforced where necessary by the state, will serve to hold the rank and file members in line. (3) Should the essentials of a free-enterprise system continue to persist, they will have been enabled to persist by the subordination of the policies of both unions and employers to flexible rules calculated to insure workable competition. Under such rules secular real wage changes will be domi-

(c) probably rise (fall) with an increase (decrease) in national income. If we divide the labor force into those employed in private industry, those employed by the government, and those who are unemployed, it is evident that, *ceteris paribus*, an increase in the number of unemployed will reduce aggregate real income while an increase in the number employed by the government may have this effect, since government output may be less preferred. A shift of workers into industries marked by disguised unemployment also will entail a diminution in aggregate real income. Evidently, then, the spread of bilateral monopoly eventually renders the economic condition even of its initial beneficiaries worse than it would be had conditions of simple competition been allowed to prevail.

nated by the secular change in over-all output per worker; perhaps 1.5-2.0 per cent per year; the price system will be permitted to perform its allocative function; wage differences will be enabled to dominate labor allocation and occupational choice, though diminishing in consequence; price reductions, enforced by the state if necessary, will distribute the bulk of the fruits of innovation; while fiscal policy will be relied upon to eliminate such inequalities in income and wealth as are deemed socially undesirable. Should the effectuation of such rules not prove possible, approach "2" may be anticipated, but probably only as a prelude to approach "1."

In sum, the present is a period marked by a recent redistribution of politico-economic power, and transaction relations have been affected accordingly. There has not been time for the community to comprehend the significance of this power shift—a shift which not even the latter-day judiciary foresaw. Hence countermeasures have not yet been taken. But such containing measures, such institutional adjustments, appear almost inevitable. It may be taken as axiomatic that a rational and alert community, if it cannot immediately reduce newly risen power concentrations, will circumvallate them and gradually deprive them of necessary nourishment. For just as possession of great power tends to be self-corrupting, so does its wanton exercise tend to be self-destroying. Even so, most of contemporary exploitation's victims, if they remain irrational and indisposed to unite, will have been gathered to their fathers before effective counteraction has been taken.

Appendix

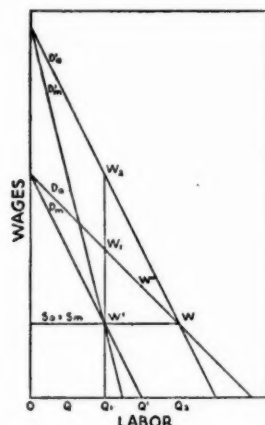


FIG. I

Figure I is designed to illustrate (among other things) point "2," albeit roughly, since lack of space prevents our defining adequately the conditions underlying the curves. $S_a = S_m$ represents the labor supply curve with which the union (or co-operating unions) confronts the employer (i.e., the monopolized industry). (In the absence of union control S_a would be upward sloping and S_m would be marginal to S_a , thus giving us the kind of supply situation usually supposed in bilateral monopoly analysis.) D_a is the demand curve for labor in industry II if it operates under conditions of simple competition; D_m is the corresponding marginal revenue curve. D'_a and D'_m are similar curves for industry I and are subject to the same qualifications.

D_a is a derived labor demand curve, obtained by subtracting from the value of various quantities of output hypothetically marketed to competing customers the corresponding outlay for agents of production other than labor used to produce said quantities. The height of D_a varies inversely, therefore, with (a) the prices of the variable agents used jointly with labor, (b) the time horizon envisaged and the allowance consequently necessary for replacement costs and for agents not provided for under "a." D_a ought properly to be represented, therefore, not by a curve but by a band bounded by appropriately defined upper and lower limits. D_m is subject to the qualifications indicated. Neither curve as drawn

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takes into account the fact that if the investment of nonlabor resources in the industry is adjusted to the production of the output realized when Q_1 instead of Q_2 labor is used, the D_1 and the D_m curves will be shifted slightly. A more careful statement than is here attempted would take this shift into account. In general, then, while wage maxima are here supposed to lie along D_1 and wage minima along D_m , these maxima are but approximations here used for expositive convenience. While our analysis runs in essentially static terms, it may be made more dynamic by contemplating shifts in the curves (see note 22).

Under simple competition as here represented Q_2 workers are employed at wage W in both industries. Now suppose each industry is bilaterally-monopolized, with the joint profits in each maximized. Then, given the quantity of labor furnished by the union, the wage may range between the average and the marginal value of this quantity of labor (e.g., in industry II, between W' and W_1 for Q_1); and, given the wage, the quantity employed may range between the values corresponding respectively to the intersections of S_1 with D_m and D_1 (e.g., in industry II, between Q and Q_1 if the wage at which labor is furnished is fixed at W_1). If the wage (or quantity of employment provided) lies on (or corresponds to) the D_1 curve, the employer industry is receiving only the minimum remuneration necessary, given the time horizon envisaged, to elicit the nonlabor agents essential to the employment of the indicated amount of labor. If in industry II the wage is suddenly forced up from W to W_1 , employment will shrink from Q_2 to between Q_1 and Q , according as the union is strong or weak. Unemployment will increase accordingly (however, see note 22 for qualifications).

Figure I does not indicate at what level the union will fix the wage if it has the power to do so. If its objective, given a bilaterally-monopolized industry II, is to maximize aggregate worker income, it will require the industry to employ Q' workers at wage W'' , since at W'' the elasticity of D_1 is unity. If the union's objective is a high wage, it may seek one lying on D_1 near the Oy axis; but this high wage would entail a sharp limitation in the number of jobs industry II could provide. (While W appears to coincide with the maximum wage attainable by Q_2 workers, it needs to be kept in mind that the wage obtainable by Q_2 workers is slightly higher under bilateral monopoly conditions than under simple competition, since in the former case the union can appropriate certain price determined rents which under simple competition pass to employers.) Our discussion above has not taken into account such increases in output as are initially consequent upon unionization, in part because such increase does not modify the argument, and in part because the output increasing influence of unionization is quite limited (e.g., see F. H. Harbison, "Some Reflections on a Theory of Labor Management Relations," *Journal of Political Economy*, 1946, pp. 1 ff.). On the all-or-none aspects of the annual wage, now being increasingly demanded, see W. Leontief, "The Pure Theory of the Guaranteed Annual Wage Contract," *ibid.*, pp. 76 ff. While there are limits to the applicability of the theory of bilateral monopoly to the wage bargain (e.g., see Ross, *op. cit.*, Chs. 1-2), this theory is well suited to disclose the ultimate implications of union policies. On bilateral monopoly theory see W. Fellner, "Prices and Wages Under Bilateral Monopoly," *Quarterly Journal of Economics*, 1947, pp. 503-532; J. N. Morgan, "Bilateral Monopoly and the Competitive Output," *ibid.*, 1949, pp. 371-391; Dunlop, *Wage Determination*, especially Ch. 5; F. Zeuthen, *Problems of Monopoly and Economic Warfare* (London, 1930), Ch. 4. Fellner and Morgan review some of the literature.

DISCUSSION

NEIL W. CHAMBERLAIN: The detached point of view and the careful analysis which characterize Professor Spengler's paper are sufficiently apparent so as not to require further comment. They recommend a sympathetic examination of his remarks considered as a thesis. In addition he has offered certain redefinitions of concepts and spelled out systematically the meaning of others which are often left amorphous. These details warrant more specific examination. In the brief time allotted to me, however, I shall confine my remarks to the gist of his paper, its central theme, rather than to any of its parts, in the belief that this will sustain a more general interest.

I am in general agreement, as I suspect all of us are, that a problem exists in the phenomena described by Professor Spengler. I am in disagreement as to the nature of its economic basis, as to its essentially ominous character, and as to its transient quality. It is perhaps unfair to comment on one line of approach by countering with another, but my disagreement is so fundamental that I hope my remarks will be accepted for their specific contrast and not as an independent and unrelated line of thought.

First, as a preliminary which does not go to the heart of the matter but which nevertheless needs to be said, unions are not the irresistible forces which they are sometimes pictured to be. Nor, despite the growth in size of bargaining units, is the uniformity of bargained terms so close and widespread as is sometimes assumed. The key bargains exist, to be sure, but they are key in the sense of directing impulses or influences and not always in the sense of transmitting unchanged the amount of the charge. The United States Steel Corporation represents a key bargaining center, the terms of whose collective agreement are accepted virtually without modification in a number of other basic steel centers. As a key bargain its influence extends beyond basic steel, however, affecting in direction the bargains which take place, for example, in the steel fabrication industry; but here the impulse feathers out into a range of actual results, in which diversity rather than uniformity prevails.

This diversity of terms which may have had a common directional impetus is important in understanding why managements may not quite so willingly accede to whatever demands are made by the union, in confidence that recompense may be had from the unarmed consumer. It is thus significant in suggesting why the fear of bilateral monopolies, while not unwarranted, may be excessive. For just as each union formulates its demands, to quote Professor Spengler, "as do tariff seekers, upon the supposition that it stands to gain more than it will lose, and that it certainly will lose through price rises elsewhere if it demands nothing," so do managements calculate that to concede to their union without resistance may be to subject themselves to a relative disadvantage in competition with firms which, while conceding something, have not conceded all. Nor is there much indication that any union or federation of unions will succeed in bringing under one compact with common terms all industries whose products are functional substitutes for each other.

Moreover, even if we assume uniformity of wage changes, the results for individual firms are variant, depending among other things on the price

changes which are induced and on buyers' price elasticities of demand. The accompanying shifts in consumers' preferences as they find expenditure substitutes (as well as functional substitutes) will have an uncertain net effect on individual producers' sales. These differential and possibly unfavorable effects are of course allied to one of the major forces which Professor Spengler sees as inhibiting the unions directly in the long run. But I would urge that they are also likely to act indirectly in the short run by stiffening the resistance power of managements—a resistance power which in many cases is still formidable.

For this and other reasons which, with more time, might be added, I am inclined to doubt that unions either now hold or will in the future hold the full powers of exploitation which sometimes have been attributed to them. But this is said only to bring the problem down to more realistic dimensions. It does not change the fact that the unions do possess great economic and political powers, which are still on the increase, and that this fact presents a problem which must be met. And on this score I am happy to note that this Spengler predicts no "decline of the West" but rather appears to believe that union excesses will in time bring their own correction. I should agree that if the unions do embark upon a policy of unmitigated group selfishness, ignoring the welfare of society generally or unrestrained by a systematizing of their functions within a larger pattern, they are apt to find themselves shorn of their misused strength by a tired citizenry which includes many of their own members.

Now let me turn to more fundamental considerations. Professor Spengler regards unions as price-making institutions which came into being through failure of a capitalistic society to reduce prices and advance wages sufficiently. He thinks of them as monopolistic in the usual price-affecting sense, designed to exact "a supracompetitive wage." The problem thus shapes up as one of the desirability and likelihood of restraining economic monopoly when it assumes the union dress. Here is a problem couched in terms that are familiar to generations of economists bred on liberal economic traditions. But its very statement in these terms robs it of its real significance—that the developments in industrial relations represent not just a threat to the workability of the price system but a challenge of its philosophical and ethical foundations. Monopoly when judged within the framework of price theory can be readily condemned. But unions are not such simple economic monopolies, and when their actions raise questions concerning the nature of the system itself they cannot be answered merely by quoting the tenets of the system. The unions, that is to say, are forcing a re-examination of whether the framework of price theory is adequate for our times. This is a large and an insistent challenge, but I find no reference to it in Professor Spengler's paper. I shall have time to refer briefly to only one major aspect of the problem.

The optimum allocation of factors of production with which he is largely concerned has been conceived for some time as based on maximum consumer satisfaction. The means by which the factor labor was to be allocated was the money wage, whose motivating power came from its exchange value. What we

have been in the process of discovering for some time now is that this whole system of reasoning has a faulty foundation in the premise that consumption is the only purpose of the economy and the overriding desire of the individual. The increasing number of studies documenting the proposition that workers and unions are importantly motivated by nonpecuniary considerations are simply suggesting, in other terms, that workers and unions are not solely interested in satisfying consumer wants, but that satisfaction in the process of production and enjoyment of the job and the worker society which it represents are important parts of living. Their interests as producers are worth considering along with their interests as consumers. Those interests as producers require organization to protect them from a price system which seeks the individualization of the market. And organization spells monopoly.

To condemn unions as monopolies, within the framework of the price system, is thus in effect to insist that they have no right to champion their own interests as societies of producers. I submit that that issue has not been resolved by society at large, and that it is too early to foreclose it simply by a reaffirmation of traditional thought buttressed by an imposing theoretical system. It is perhaps worth noting that even the classical and neoclassical writers admitted some departure from the standard that the economy should be geared to maximum consumer satisfaction. Their concept of "psychic income" was sometimes used to explain wage differentials on the ground that a man might derive from his employment such enjoyment that he would willingly accept a smaller wage than he might earn elsewhere. So little impact did this concept make on the body of doctrine, however, that it constituted little more than an interesting footnote to the main stream of thought. There was no appreciation that here was being touched on the phenomenon of producer interest, a matter of such high importance that it was to threaten—in our day—the system which excluded it.

All this is not to argue, of course, that the organizational power which workers acquire in the process of seeking a kind of satisfaction in their working lives may not be abused. It does nothing more than suggest that the union's inevitable interference with the "optimum" allocation of labor cannot be judged harshly out of hand, even though the degree of its interference with consumer satisfaction warrants continuing attention. We may legitimately apply the tenets of price theory, condemning monopoly behavior, where the union operates as a simple pricing monopolist. But where the union demands judgment by other standards we shall have to examine those standards before rendering judgment.

Finally, as to the role of the social scientist in all this, I sympathize with Professor Spengler's weariness with panaceas, but I should not want to extend such a weariness into a disavowal of professional responsibility for possible solutions. If it is true that the freely competitive pricing system no longer constitutes an acceptable normative pattern for important numbers of people within our society, I would judge it incumbent upon those within our profession whose interests run to questions of welfare to begin the labors of piecing together a new systematization of norms that preserves—in some measure—

the values of the old and adds—in some measure—the omitted values which time has shown to be important. In such an approach may lie the greatest likelihood of appropriately restraining the unions. For if we explicitly and systematically recognize the values which they can justify their seeking, we may find a greater willingness on their part to conform to a general pattern which recognizes, too, values which otherwise they might be led to attack.

AMERICAN CAPITALISM: WHERE ARE WE GOING?

THE CONDITIONS OF SURVIVAL

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I

The purpose of this paper is to discuss the growth of private power in American society and to ask if this power can be brought under responsible control in the constitutional state without endangering civil and political liberty. I shall try to show that this is a real issue and that the issue of socialism and serfdom versus capitalism and democracy is a false and misleading issue, because the alternatives are not historically genuine. Indeed, to pose the issue falsely is likely to play into the hands of the extreme right or the extreme left, to suggest to people generally that we must either elect a totalitarian communism or suffer all the ills of unregulated capitalism. Such a way of putting the issue is a dangerous oversimplification which, in effect, grants much of the communist argument.

The communists, it is true, condemn both the legal-economic system of private ownership and disposal of capital goods and the liberal political system of what we may loosely call capitalist democracy. They condemn the economic system on the grounds that it is inefficient, that it is unstable and must at some time break down. They condemn the political system because they argue that the capital-possessing class controls, by economic power, the true political power, and so the apparatus of the national state is used as the police arm of the capitalist class. There is no doubt, however, that it is not "scientific" Marxism that possesses emotional appeal to working people. It is, rather, that communism today has become a new apocalyptic and evangelical religion, with an extraordinarily well-organized missionary system. Communism condemns the evils and injustices which are common in any real and existing society and promises to a generation in whom religious faith in another world has grown weak, a future life in this world in which some of the conditions of paradise will be realized. It is important to remember that the communists do not necessarily promise an immediate improvement in the national standard of life. Much of our Western propaganda in the so-called "cold war" is vitiated by this supposition, and the propaganda picture of an America flowing with radios and motor cars has little appeal to the European worker as against the communist promise of a society in which the worker gets a fair share of the necessities of life.

The appeal of this new religion has been, I suspect, sadly underestimated by those who believe that communism can be successfully countered by denunciation and persecution. These weapons have seldom proved reliable against a system of ideas. In the present case, communism derives strength from three of the most powerful forces in our tradition. It appeals, however speciously, to the Hellenic-Christian ideal of justice and fair play; it claims to be scientific, and makes this claim in such a form as to catch up some of the prestige and authority which modern science has won for itself; and communism, finally, conforms to the profound apocalyptic sense of all peoples who have come under the sway of Judaic-Christian thought.

This is a strong appeal, and the people of America will resist it only as long as their own economic institutions command their respect and their own social philosophy holds their faith. This means that American capitalism, as an economic system, must continue to work. It also means that American political and economic leadership must continue to command moral authority and respect. Thus some of the questions which we must ask now emerge. Can we control the movement of the trade cycle? Can physical production be continuously increased? Can foreign markets be retained and supplied, and can the chief trading countries enter the American market in sufficient volume to balance their payments? Can the national and international allocation of resources be improved so as to eliminate waste and so as to maximize welfare with given resources and techniques?

These are the economic questions. More important are the political and moral questions. Has the political system the flexibility necessary to assimilate economic changes and to operate economic controls without loss of freedom or responsibility? Are the developing institutions and ideas of capitalism consistent with a healthy democracy and free political institutions? Have the attitudes, the social beliefs and myths and ideals associated with what we call capitalism the kind of moral quality which survives?

Since in a short paper one must select rather arbitrarily, I propose to make some rather bold assumptions. I shall assume that, by means of appropriate monetary, fiscal, and commercial policies, the business cycle can be brought under sufficient control. I do not want this assumption to be misunderstood. I am not making the optimistic prediction that there will be no more depressions. Also, I am not saying that, since Lord Keynes, we possess a perfect apparatus for the control of the business cycle. I am fully aware of the formidable difficulties of forecasting, of timing, of achieving downward flexibility of public spending in inflationary periods, and upward flexibility of taxes. I am aware of the severe limitations of Keynesian fiscal policy. Further, we must all

realize the political opposition to such policy and the chanciness of political prediction. Hence the assumption I have made is intended only as a working hypothesis to enable us to concentrate on the political questions which arise if effective economic controls over the cycle are attempted. In the condition of the world today another severe depression in the United States would be catastrophic. It must be prevented. We assume that it can be, and ask if that alone is a sufficient condition for the survival of American capitalism.

Our other assumptions are similarly working hypotheses and follow, in the main, from the initial assumption. We shall assume that the problem of the European balance of payments is also solved. If there is no depression in America, this should not be too difficult. It requires of the United Kingdom and west Europe a continued expansion of industrial production and a reduction of costs from improved techniques. It requires of the United States not only the maintenance of a high level of income and employment but also a genuine, honest, and effective reduction of tariffs, the removal of subsidies and import prohibitions—a complete reversal, indeed, of American commercial policy. It requires, further, that the United States undertake a much greater share of the burden, so long supported by Great Britain, of supplying capital to the underdeveloped and capital-starved countries of the East. I hope I am not too sanguine in believing that American public opinion is becoming aware of these responsibilities.

Finally I assume, this time with considerable confidence, that the degree of monopoly in the Western World, serious as it may be, has not and will not distort the economic allocation of resources to a really damaging extent. I do not like monopoly, but this particular consequence of it can be exaggerated in significance.

So we come at last to the questions, which, on the basis of the above assumptions, I really want to discuss.

II

There has been some disagreement among economists about the effects of industrial concentration and the decline of competition. The processes of concentration and consolidation were set in motion by transport innovations which broke down local monopolies on a small scale and which made possible regional, national, and even international markets. Innovations in advertising and merchandising turned these potential continental geographic areas into actual mass markets, and innovations in the productive process made the large-scale firm, with all the economies of scale, a practicability. Even the limitations set by the inability of a single management to administer an organization beyond a certain scale were widened by innovations like the dictaphone

which economized entrepreneurial time and devolved administrative tasks.

The great increase in optimum and average scale of establishment and the diminution in numbers of firms were not consistent with perfect price competition. Many markets have become monopolistic or, to some degree, imperfectly competitive. These facts, I believe, are pretty well agreed. On two points there is some disagreement. While some economists regard this process of concentration as continuing, others believe that it has passed its height and that there is now a tendency towards decentralization of industry and the re-emergence of a smaller optimum size of formation. The evidence which I have seen is conflicting. I do not propose, however, to review the evidence here, because for the argument which is to follow, the important point is that a high degree of concentration has now taken place. I suspect that it is continuing, though at a reduced rate, but I will not press this point in view of the uncertain evidence.

The other point of disagreement is about the welfare effects of the process of concentration. Whereas some economists believe that every increase in the degree of monopoly is socially undesirable, others point out that the social gains from economies of scale more than offset losses from the decline of competition, and that there is, in any case, a sufficient competitive element remaining to protect the consumer against exploitation. Again I shall evade the issue of this debate, because I wish to focus our attention on another aspect of industrial concentration towards which both parties in this debate are neutral and their arguments irrelevant. Instead of looking at the aspect of misallocation of resources, I wish to look at the question of power.

Industrial concentration results in the creation of power. Not only that, power has become an equal motive with profit in economic activity. A proper understanding of the function of entrepreneurship reveals this proposition to be true. The entrepreneur in our society has the distinguishing function of anticipating the future. He may share with ownership, it is true, the function of accepting risk, and he may share with his managers the function of technical organizing. In a static and fully competitive economy there is no entrepreneurial function. The decisions as to the least cost combination of the factors and as to the maximum profit output are purely technical decisions, exactly analogous to the engineer's decision as to optimum pressure in his boilers. By contrast, the entrepreneurial function is the calculation of the future and the determination today of policy for tomorrow.

A business firm in a capitalist economy is guided, in the first instance, by the profit motive. It is the function of the entrepreneur to anticipate future developments and to plan the output and investment program

of the firm so as to maximize profits. Firms do not, according to this rationale, necessarily maximize the rate of profit at a point of time; they maximize the total of profit over a foreseeable period of time. Maximization at a point of time will constitute maximization over a period only when there is no expectation of the rate fluctuating over the period. Hence the maximum profit point where the slopes of the total cost and total revenue curves are equal is a satisfactory determination of maximum profitability only on the assumption of a static society or on the assumption of expectations of unchanging conditions of demand and production. This is another way of saying what I have already said. There is no place for the entrepreneur in the static, perfectly competitive economy of economic theory. Such an economy is a nonprofit economy, and one in which there is no opportunity for profit. Only in a dynamic and/or noncompetitive economy is there the possibility of profit, and it is under dynamic conditions that the entrepreneur appears. It is interesting to note that the business enterpriser in our sense is a phenomenon of the modern, Western World. He appears in history as successor to the managers (bailiffs) of estates and the working tradesman when it becomes possible to make great gains by buying in the present to sell in the future.

The entrepreneur, therefore, has the function of directing the policy of the firm according to expectations of the future, so as to maximize the net gains of the firm's operations over a period of time. Such a function can be exercised only in a dynamic economy.

For purposes of the present argument I shall ignore what we might call general expectations and concentrate on what we may call particular expectations. By general expectations are meant expectations as to the general movements of prices, employment, national income, etc.—expectations which, in addition to being general in this sense, are also general in the sense that they tend to be held in common by the business community. By particular expectations are meant those entertained by a single firm about the particular conditions of the industry, especially about the possibilities of increasing sales at the expense of its competitors, and about the response of competitors to changes in its output, advertising pressure, or selling techniques. While this kind of situation is essentially indeterminate¹ we do know that the successful entrepreneur, who aims at establishing for his firm a secure and permanent profit position over time, must aim to increase the degree of monopoly possessed by his firm. This is because only profits earned by enhancing the degree of monopoly can be regarded as secure and

¹ I am not happy about this use of the word "indeterminate." Recent writings (cf. G. L. S. Shackle, *Expectation in Economics* [Cambridge, 1949]) would suggest that, under certain assumptions, the entrepreneurial decision can be shown to be determinate, although the consequences of any particular decision are uncertain.

reasonably permanent. There are, if we neglect windfalls based on correct general expectations, three main sources of profits over time. These are: from innovations or cost-reducing improvements; from changes in demand; from a decline of competition or an increase in the degree of monopoly possessed by the firm.

Now in a highly competitive society, as Professor Schumpeter has shown, profits from cost-reducing innovations tend to be ephemeral. The firm finds itself continuously driven from improvement to improvement if it is to hold its position relative to its competitors, let alone to retain any surplus profits gained from a more aggressive policy of innovation.

General changes in taste are slow in developing and uncertain in any case. The entrepreneur is not, today, interested in such spontaneous, long-run, and uncertain changes. He is interested—most aggressively interested—in induced changes in consumers' behavior, and here he is primarily interested not only in a tendency to consume, say, more tobacco per head but in inducing a tendency to consume more tobacco of a certain brand. Admittedly there is a considerable business interest in general consumption trends, even to the extent in certain industries of noncompetitive advertising to induce increased consumption of an article regardless of brand. In spite of this admitted exception, it is fair to say that the contemporary entrepreneur bases his expectations of future sales on present sales plus what he can hope to induce at the expense of his competitors by brand advertising.

Such advertising assumes conditions of nonperfect competition and is directed at increasing the degree of monopoly possessed by the firm. Thus we are justified in combining the treatment of expectations about demand with expectations about the degree of monopoly possessed by the firm.

Since it is the function of the entrepreneur to put the firm in the position of earning maximum total profits over a period of time, he will naturally be less interested in cost-reducing innovations under competitive conditions which can earn him but temporary gains, and more interested in innovations in advertising or merchandising which will increase his degree of monopoly or protect his security in a favored position in the market.

There is some empirical evidence that this somewhat speculative and controversial thesis describes a real trend. There is, for one thing, the stress, in many industries, on the introduction of "selling points" rather than on genuine technical improvements. There is the keen interest of business in innovations in advertising and selling techniques. There is, finally, the marked tendency for the new entrepreneurial group to be

recruited increasingly from the advertising or sales executives rather than from the engineering or production staff.

I suggest that one result of this trend may be that the technical superiority of American industry over its foreign competitors will be reduced. A second result may be that the American people will place less faith in business leadership. The qualities that make for success in advertising and selling are not necessarily those which in the long run command confidence and respect. The business leaders of the past may often have been ruthless, selfish, and grasping. They had the quality, nevertheless, of leadership. They did their job better than anyone else; they were venturesome, innovating, and creative. The newer group tend to be slick and facile. They seek security rather than risk, and try to bluff the public into believing in their creativeness. The vulgarity and blatant insincerity of some sections of the American press and radio are symptoms and a reflection of the attitudes of the entrepreneurial leader group.

The third, and most important result of the trend I have been describing—and here I pick up once again the main burden of my argument—is the concentration of power. In an earlier passage it was suggested that the function of the entrepreneur must be distinguished from that of the owner. The entrepreneur, however, can only discharge his function properly if he has control over the enterprise. Thus a condition of entrepreneurial activity in corporate industry is adequate control. This is a way of saying that the entrepreneur requires power. Moreover, the extension of the degree of monopoly is an enhancement of power. Hence the profit motive, in this instance, coincides with another motive, equally important in the history of man's affairs, the desire for power. While I do not accept the Marxist view that the economically powerful group controls, in all democracies, the machinery of the state and uses it for its own purposes as a "police weapon," I do wish to stress the economic power possessed by the entrepreneurial class and the uses to which this power is put. The entrepreneurial class exercises a potent influence over all the means of public communication—the press, the radio, magazines, books, television, and the movies. These cultural agencies reflect the entrepreneurial influence and point of view. I have already referred to the moral and cultural effects of this process. We may note that there are political effects, also, and ask if responsible, representative government can continue in this kind of social environment.

The theory of liberal democracy is that at any time there is a common national interest and a sense of national purpose. There will be disagreement about some of the particular constituents of the national interest

and about how best to effect the national purpose. The exercise of a sound social judgment requires that the issues be clarified by parties, that the facts be presented to the public by a free press, the alternatives of policy freely discussed, and the social decision rendered by a free electorate. Imperfections in this system are to be expected. There is a distinction, however, between imperfection and corruption. We are bound to ask if the present power of business enterprise in the United States is consistent with a free press, full and free public discussion, the intelligent exercise of the franchise and a responsible legislature, free of particular pressures to pursue the common interest.

There is, in the United States, a profound belief in the concept of the balance of power. Much comfort is thereby taken from the rise of organized labor. Balancing the power of the great industrial combines is the massed and disciplined power of the great trades unions, some of them with a monopolistic control over certain labor markets surpassing anything achieved by private industry, and many of them with a hierarchical power structure which concentrates immense and irresponsible power in a single hand.

While we must admit both the necessity and the social utility of collective bargaining, we may yet pause before this proposition that the conflict of pressures between labor and industry is the kind of balance of powers that makes for good liberal government. It is doubtful if any notions of national interest can emerge. National policy is simply a compromise of group interests. Sometimes the compromise is in the form of a conspiracy against the rest of the public. A strongly organized labor group may win special concessions, say pensions, of which less favored groups may stand in need, but which are paid for by these less favored groups in the form of higher prices. It becomes a kind of indirect taxation. If these social security measures were generalized and made available to all citizens, they could then be paid for on a contributory basis, and the government's share would be met out of taxation levied according to ability to pay. All national policy is necessarily a compromise, but there is a difference between compromises of the general interest because of conflicting or qualifying elements, and compromises or conspiracies between powerful groups for their own special advantage at the expense of the general good. There is a difference in principle between the power exercised by government and that exercised by organized pressure groups. The power exercised by government is responsible power. If it is abused, if the general interest is not promoted, there is a constitutional recourse against those who have abused their position. The power, however, of Mr. Luce or Mr. DuPont or Mr. Lewis is not responsible in that sense. They may or may not exercise their power wisely; the point is they cannot readily be held to account for

their use of it, and such responsibility as they do have is not to the public for the general interest but to a relatively small group for a factional interest.

III

This means, if I may now draw certain conclusions from this argument, that the powers of the state will increase if the liberal democratic state is to survive. Let us recollect that from the beginning of this argument we assumed certain public controls, mostly of an indirect sort, in order to damp the business cycle, to restore the balance of payments, and to maintain high levels of income and employment. Thus already the state would be exercising a powerful control over business. We have now seen that the economic process has created great concentrations of economic power, which are valued in themselves and which are being used as bases of irresponsible political power. Moreover, the occasional industrial conflict between these great power groups can cripple the national economy. Great and irresponsible power is a threat to any civil society, and the processes by means of which this power is gained and exercised tend to corrupt the democratic institutions of government. In the United States this is the more acute because the kind of person who is emerging to lead the major power group is not of a sort to command public confidence and respect.

The power of the great industrial consolidations and, to a lesser degree, of the great trades unions must be curbed. That this can be done by such acts as the Sherman and Taft-Hartley Acts, I very much doubt. Antitrust action affects the legal fact of consolidation, not the economic and political facts of concentration. There are cases of consolidation which can only be handled, I suspect, by public ownership. Successful labor legislation, on the other hand, must protect collective bargaining rights. I am inclined to believe that the Canadian Industrial Disputes Investigation Act is the kind of model which could be used, with improvements, to protect the public interest. However that may be, and I mean to ask questions not to answer them, it seems clear that attention should center on experimental devices for the appropriate controls which will prevent the abuses of irresponsible power.

This brings us to a question which has been much discussed of recent years. This question may be put in the form of a paradox. Traditionally, in our society, the great enemy of individual freedom has been the state. Yet the protection of freedom today seems to call for an increase in the powers of the state. I hold, with Locke, that to say that free action is uncaused or unpurposeful is nonsense and means that only "fools and idiots are free men." Freedom consists of purposeful action, and implies, in all social processes, an intelligent understanding of these proc-

esses and a purposeful direction of them and control over them. A society which suffers from an unwanted depression is not a fully free society. A society which has to obtain the facts on which social decisions are based from a corrupt press serving a contentious faction is not a fully free society. Thus freedom necessitates adequate public control over the social process.

On the other hand I deplore the tendency of some socialists to talk as though the accumulated experience of our history was meaningless and to speak with equanimity, even satisfaction, about the increase of the administrative powers of the state. This is a dangerous process and forms the other side of the paradox. Freedom requires control, yet control is apt to mean an irresponsible bureaucracy. The resolution of this paradox is, I think, the main problem of modern democracy. I do not know how it is to be solved. I am sure that the presentation of the issue in a false and contentious way is no contribution to solution. I have already referred to those socialists who want public control and public ownership and care nothing for the dangers of concentrated administrative power. On the other side are those who present us with the false choice of "freedom and capitalism" versus "planning and socialism." Socialism or capitalism is scarcely a relevant issue any more. All the Western states are mixed economies. Whether nominally socialist, like the United Kingdom or Norway, or nominally capitalist, like Canada or the United States, they are all experimenting with fiscal and other indirect controls over industry; they are all experimenting, though in varying degrees, with public ownership at the municipal, state, or national level; and they are all facing the problem of administrative power and bureaucracy. I am not even sure that a little more public ownership rather than a little less intensifies the problem. After all, it was the Labour Government in Great Britain which passed the Crown Procedures Act. The Liberal Government of Canada has no equivalent act freeing individual citizens of traditional disabilities in actions against the Crown.

Thus, I believe that the real issue is not socialism versus capitalism or stability versus freedom. The real questions have to do with the most appropriate controls, the minimum administrative apparatus necessary for their implementation, and then the constitutional devices necessary to ensure that administrative power is never arbitrary or irresponsible. We have to ask how the chain of responsibility can be retained and strengthened, how the power of the legislative branch can be augmented *pari passu* with that of the executive, how the courts can be protected as suitable agencies of review of administrative acts. These and similar questions are what we should discuss. To their solution I can make now no positive contribution, though I hope at a later time to discuss them

in detail as they exist in parliamentary democracy. I can only urge that their successful solution is the condition of the survival of American capitalism and American democracy, and that, for their solution, the divorced disciplines of economics and political science must be reunited. That divorce has always struck me as a particularly tragic one. The progeny of the old marriage were certainly splendid children, and a new insemination is now necessary. It is surely desirable that it should be legitimized.

THE MARCH INTO SOCIALISM¹

By JOSEPH A. SCHUMPETER
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I

In order to minimize the danger of misunderstandings that is ever present in discussions on topics such as the one of this session I want first of all to settle a few preliminary points before taking up my subject, which is the relevance, for the economic future of this country, of the present state of inflationary pressure.

a) For the purposes of this paper, I define (centralist) socialism as that organization of society in which the means of production are controlled, and the decisions on how and what to produce and on who is to get what, are made by public authority instead of by privately-owned and privately-managed firms. All that we mean by the "march into socialism" is therefore the migration of people's economic affairs from the private into the public sphere. Observe that though both socialists and antisocialists have of course ideas of their own on the subject, it is hardly possible to visualize a socialist society in this sense without a huge bureaucratic apparatus that manages the productive and distributive process and in turn may or may not be controlled by organs of political democracy such as we have today—a parliament or congress and a set of political officers who depend for their position upon the results of a competitive struggle for votes. Therefore we may equate the march into socialism to a conquest of private industry and trade by the state. The apparent paradox that this very same process is described by classic socialist doctrine as the "withering away of the state" is easily resolved if we take account of the Marxist theory of government. Observe further that socialism does not exclude decentralized decision making in the administrative sense—just as the central management of an army does not deny all initiative to commanders of subgroups. And observe finally that socialism in our sense does not necessarily—that is, by logical necessity—exclude the use of competitive mechanisms as we see, e.g., from the Lange-Lerner model. Freedom of consumers' choice

¹ Joseph Schumpeter delivered his address, "The March into Socialism," before the American Economic Association in New York on December 30, 1949, from notes and not from a prepared manuscript. He was writing up these notes for the *Proceedings* and had all but finished his paper the evening before his death. He expected to complete it the next day (January 8, 1950) before leaving for Chicago to deliver the Walgreen Foundation Lectures. This paper is a first draft but carefully written in his own hand as were all his writings; there was no opportunity for him to make minor corrections or to write the concluding paragraphs. The corrections, which consist largely in supplying punctuation or an occasional missing word, have been kept to a minimum. The brief concluding paragraphs have been supplied by his wife from notes and memory.

and of choice of occupation may, but need not necessarily, be restricted in socialist societies.

b) I do not advocate socialism. Nor have I any intention of discussing its desirability or undesirability, whatever this may mean. More important is it, however, to make it quite clear that I do not "prophesy" or predict it. Any prediction is extrascientific prophecy that attempts to do more than to diagnose observable tendencies and to state what results would be, if these tendencies should work themselves out according to their logic. In itself, this does not amount to prognosis or prediction because factors external to the chosen range of observation may intervene to prevent that consummation; because, with phenomena so far removed as social phenomena are from the comfortable situation that astronomers have the good fortune of facing, observable tendencies, even if allowed to work themselves out, may be compatible with more than one outcome; and because existing tendencies, battling with resistances, may fail to work themselves out completely and may eventually "stick" at some halfway house. Let us illustrate this point by point.

First, no competent—and, of course, sufficiently detached—observer of Russia in the Stolypin era could have diagnosed the presence of any tendency towards anything at all like the Lenin system or in fact anything but rapid economic evolution and a lagged adaptation of institutions to the results of that evolution. It was a war and the consequent military and administrative breakdown which produced the Bolshevik regime and no amount of unscientific determinism avails against this fact. Second, for the sake of brevity, I speak of centralist socialism only because it holds a place of honor in the discussion. But other possibilities should not be neglected. Familiar facts of our own trade-union practice suggest that a development towards some form of guild socialism is not entirely off the cards. And other familiar facts suggest that observable tendencies or some of them may be compatible with forms of social reorganization that are not socialist at all, at least not in the sense which has been adopted for this paper. For instance, a reorganization of society on the lines of the encyclical *Quadragesimo anno*, though presumably possible only in Catholic societies or in societies where the position of the Catholic Church is sufficiently strong, no doubt provides an alternative to socialism that would avoid the "omnipotent State." Third, most observable tendencies of any kind stop short of complete achievement. Thus, a socialist regime in this country would have to be bold indeed if it ever thought of touching the subsidized independence of the farmer. Even the position of the "small businessman" might prove too strong for bureaucracy to conquer and a large fringe may therefore be covered indefinitely by compromise arrangements.

Still more important is something else, however. As economic cares migrate from the private to the public sphere, many urges that favor this migration become satisfied, wholly or partly, so that the tendency may lose momentum. Some economists will add that any gradual movement towards a centrally planned economy offers opportunity for unfavorable developments to be experienced which may act as brakes. I have no time to explain the reasons why I do not rate either possibility very highly and why, in particular, results that are felt to be unfavorable by sufficiently important groups are more likely to exert a propelling than they are to exert a restraining influence; that is, that the remedy for unsuccessful socialization which will suggest itself will be not less but more socialization. But for our purpose it is essential to notice that most of the arguments that are framed in order to arrive at a result favorable to the survival of the private-enterprise economy do not really deny the existence of a tendency towards socialism in our sense, but only deny that it will work itself out completely. Since nobody can dispute this possibility there is danger that the controversy resolve itself into a battle of words, especially in the United States where mere words count for so much, where the term socialism is not popular except with some relatively small minority groups, and where many people who like the thing at the same time dislike the word and prefer to substitute another; e.g., liberalism.² Hence a brief attempt at classification seems to be indicated.

c) The reasons for believing that the capitalist order tends to destroy itself and that centralist socialism is—with the qualifications mentioned above—a likely heir apparent I have explained elsewhere. Briefly and superficially, they may be summed up under four heads. First the very success of the business class in developing the productive powers of this country and the very fact that this success has created a new standard of life for all classes has paradoxically undermined the social and political position of the same business class whose economic function, though not obsolete, tends to become obsolescent and amenable to bureaucratization. Second, capitalist activity, being essentially "rational," tends to spread rational habits of mind and to destroy those loyalties and those habits of super- and subordination that are nevertheless essential for the efficient working of the institutionalized leadership of the producing plant. No social system can work which is based exclusively upon a network of free contracts between (legally) equal contracting parties and in which everyone is supposed to be guided by nothing except his own (short-run) utilitarian ends. Third, the concentration of the business class on the tasks of the factory and the office

²For obvious reasons, this is still more the case with the term communism which, barring the Russian angle, should be used synonymously.

was instrumental in creating a political system and an intellectual class the structure and interests of which developed an attitude of independence from, and eventually of hostility to, the interests of large-scale business. The latter is becoming increasingly incapable of defending itself against raids that are, in the short run, highly profitable to other classes. Fourth, in consequence of all this, the scheme of values of capitalist society, though causally related to its economic success, is losing its hold not only upon the public mind but also upon the "capitalist" stratum itself. Little time—though more than I have—would be needed to show how modern drives for security, equality, and regulation (economic engineering) may be explained on these lines.

The best method of satisfying ourselves how far this process of disintegration of capitalist society has gone is to observe the extent to which its implications are being taken for granted both by the business class itself and by the large number of economists who feel themselves to be opposed to (hundred per cent) socialism and are in the habit of denying the existence of any tendency toward it. To speak of the latter only, they accept not only unquestioningly but also approvingly: (1) the various stabilization policies that are to prevent recessions or at least depressions (that is, a large amount of public management of business situations even if not the principle of full employment); (2) the "desirability of greater equality of incomes," rarely defining how far short of absolute equality they are prepared to go, and in connection with this the principle of redistributive taxation; (3) a rich assortment of regulative measures, frequently rationalized by antitrust slogans, as regards prices; (4) public control though within a wide range of variation over the labor and the money market; (5) indefinite extension of the sphere of wants that are, now or eventually, to be satisfied by public enterprise, either gratis or on some post-office principle; and (6) of course all types of security legislation. I believe that there is a mountain in Switzerland on which congresses of economists have been held which have expressed disapproval of all or most of these things. But these anathemata have not even provoked attack.

It would spell complete misunderstanding of my argument if you thought that I "disapprove" or wish to criticize any of these policies. Nor am I one of those who label all or some of them "socialist." Some have been espoused, even in the eighteenth century, by conservative or even autocratic rulers; others have been on the programs of conservative parties and have been carried by them long before New Deal days. All I wish to emphasize is the fact that we have traveled far indeed from the principles of laissez faire capitalism and the further fact that it is possible so to develop and regulate capitalist institutions as to condition the working of private enterprise in a manner that

differs but little from genuinely socialist planning. The economists I have in mind no doubt emphasize the differences they think likely to persist. They are not all agreed as to the precise location of their movable halfway house. But they all realize what Marx failed to realize: on the one hand, the vast productive possibilities of the capitalist engine that promise indefinitely higher mass standards of life, supplemented by gratis services without complete "expropriation of the expropriators"; on the other hand, the extent to which capitalist interests can in fact be expropriated without bringing the economic engine to a standstill and the extent to which this engine may be made to run in the labor interest. Having discovered this possibility of a *laborist capitalism* they go on to conclude that *this* capitalism may survive indefinitely, at least under certain favorable conditions. This may be so but it does not amount to a denial of my thesis. Capitalism does not merely mean that the housewife may influence production by her choice between peas and beans; nor that the youngster may choose whether he wants to work in a factory or on a farm; nor that plant managers have some voice in deciding what and how to produce. It means a scheme of values, an attitude toward life, a civilization—the civilization of inequality and of the family fortune. This civilization is rapidly passing away, however. Let us rejoice or else lament the fact as much as everyone of us likes; but do not let us shut our eyes to it.

One genuine problem remains. The diagnoses that support implications which are favorable to the survival of laborism all lean heavily on extrapolations of the present spectacular development of society's productive powers. But there is an element of question-begging in this. Past achievement was the achievement of a more or less unfettered capitalism. It cannot be assumed without further consideration that laborism will continue to perform like this. We need not accept the stagnationist thesis as it stands in order to be disturbed by the possibility that this thesis may come true after all if the private-enterprise system is *permanently* burdened and "regulated" beyond its powers of endurance. In this case, an outright socialist solution may impose itself even on the enemies of socialism as the lesser evil.

II

The transformation of social orders into one another is an incessant process but in itself a very slow one. To an observer who studies a moderate span of "quiet" time, it may well seem as if the social framework he beholds did not change at all. Moreover, the process often suffers setbacks which, considered by themselves, may suggest to him the presence of an opposite tendency. But at times we also observe accelerations and one of the most obvious causes of these are major

wars. In the past, successful wars may have added to the prestige of the ruling stratum and to the strength of the institutional framework with which this stratum was associated. This is no longer so under modern conditions. The first World War of our own epoch affected the social situation in the United States but little because the war effort was neither exhausting enough nor prolonged enough to leave a permanent mark. But in Europe it was different. In the vanquished countries where the social framework caught fire, the latent tendency toward socialist reconstruction proved its existence by emerging to the surface and, for a brief period, carrying everything before it. Still more significant is the fact that something similar also happened, though of course on a much reduced scale, in the victorious countries. In France the bourgeois republic ceased to function as it had functioned before 1914. In England, a labor party that was not yet socialist but was influenced by a socialist wing rose not indeed to power but at least to office. And in both countries, the attitude of the political sector to the private-enterprise system quietly underwent a fundamental change.

Given a pre-existing tendency toward the socialist goal, this is easy to understand. Although voices that called for a continuation of the policies established during the years of the war economy did not elicit much response and although, for a time, public resentment of war regulations blocked further advance on the same lines, no return to prewar policies proved possible even where it was attempted. This has been strikingly verified by England's gold policy and its ultimate failure. In a world that was no longer the world of free enterprise, the gold standard—the naughty child that keeps on telling unpleasant truths—refused to work.

The world crisis and the second World War were additional "accelerators" and, this time, they asserted themselves also in the United States. They created situations that were felt, rightly or wrongly, to be beyond the remedies that would have recommended themselves to the men of the free-enterprise age. The business class itself, afraid of the "adjustments" that application of these remedies would have required, accepted—though of course grumbling all the time—gadgets of regulation that might prevent the recurrence of the experiences of 1929-33 and later on others that might prevent a postwar crisis such as that of 1921. It has learned much and unlearned still more during the last quarter of a century. Also, it has accepted new fiscal burdens a mere fraction of which it would have felt to be unbearable fifty years ago—as would, by the way, all the leading economists of that time. And it does not matter whether the business class accepts this new situation or not. The power of labor is almost strong enough in itself—and amply so in alliance with the other groups that have in fact, if not in words,

renounced allegiance to the scheme of values of the private-profit economy—to prevent any reversal which goes beyond an occasional scaling off of rough edges.

Let me repeat: I do not hold for a moment that any mere “events”—even events of the importance of “total wars”—or the political situations created thereby or any attitudes or feelings entertained by individuals or groups on the subject of these situations dominate the long-run contours of social history. These are a matter of much deeper forces. But I do hold that such events and the situations created thereby may remove obstacles from the path of the more fundamental tendencies—obstacles that would otherwise slow up the pace of social evolution. Observe that this does not necessarily constitute a reason for a serious socialist to welcome such events. Evolution towards socialism would be slower in their absence but also steadier. Setbacks and the emergence of unmanageable situations would be less likely. Co-ordination of developments in the various sectors of national life would be more perfect. For just as the existence of an efficient opposition is a requirement for the orderly functioning of democratic government, so the existence of economic forces that resist institutional change may be necessary in order to keep the speed of this change within the limits of safety.

Now one of the most powerful factors that make for acceleration of social change is inflation. With so many authorities telling us that nothing undermines the framework of a society as does inflation, it is hardly necessary to dwell upon this proposition. If we accept it, then it follows from what I have just said that from all imaginable standpoints—the standpoint of irresponsible revolutionaries alone excepted—it is of prime importance after a war so to adjust a country's economic process as to stop it from producing further inflation. But it is clear at the same time that this is an extremely difficult thing to do in a world where everybody is afraid of the short-run consequences of such a policy and where some of the adjustments required—especially a rise in many previously controlled prices without a rise in money wage rates—is not “politically possible” at all.³ The course that was the obvious one to take under the circumstances and that was actually followed after 1945—among mutual recriminations but still with a good deal of common consent—was to mitigate transitional difficulties by a dose of controlled peacetime inflation that was made more effective by the continuance of a high level of expenditure on the armed services and by the policy of European aid. Substantially, all this served its purpose and, as it became evident to most people, though not to all

³ The alternative course—scaling down other prices and money wages—is not only still less “politically possible” but also much more difficult to do without causing a serious depression.

economists, that a period of vigorous economic development, entailing vast investment requirements, was at hand, the hope that major disturbances would be avoided and that the economy of the United States would expand on a slowly rising price level was, for a time, not altogether unreasonable—whatever, short of another world war, might happen abroad.

Considerations of this type fail, however, to take into account an ominous fact. At a high level of employment (we seem, at long last, to be abandoning full employment slogans), whether "natural" or enforced by high-employment policies, wage demands or other demands that increase the money cost of employing labor become both inevitable and inflationary. They become inevitable because high-level employment removes the only reason why they should not be raised. And they become inflationary because, with high utilization of resources, borrowing from banks and upward revision of prices provides a perfectly easy method of satisfying them. Though bargaining is still with individual trade unions, the movement is really a general one; so that we are drifting into the Keynesian situation in which the money wage rate no longer affects output and employment but only the value of the monetary unit. The situations of trade-union leadership and of government being what they are, there is nothing to stop this mechanism which—barring exceptions that are due to the particular situations of certain firms—spells perennial inflationary pressure. Rising demands upon the Treasury and our hyperprogressive methods of taxation aggravate this condition, of course, but they have not created it.

There should be no need to state that breaks in prices such as have occurred and will occur again prove nothing against the presence of inflationary pressure. Even apart from the postwar movements of agricultural prices and other self-explanatory cases, such breaks occur characteristically in the course of every inflation—as could be nicely illustrated from the German inflation that followed upon the first World War. People who are "caught," then cry out about deflation, and so do those fellow economists of ours who have deflationary prognoses to live down and who, in any case, seem incapable of foreseeing anything but deflation. But it is a compliment—the more sincere because unintentional—to the productive powers of American industry that doubts are at all possible as to whether our society is menaced by inflation or deflation.

III

A state of perennial inflationary pressure will have, qualitatively, all the effects of weakening the social framework of society and of strengthening subversive tendencies (however carefully wrapped up in

"liberal" phrases) that every competent economist is in the habit of attributing to more spectacular inflations. But this is not all. In addition, some of the standard remedies for such situations will not mitigate, and may even aggravate, the present one. It seems to me that this is not being fully understood. Let us, therefore, in desperate brevity, discuss three types of such remedies.

a) The most orthodox of all measures for the control of inflation is action upon the volume of borrowing through interest rates or credit rationing and the like. I fully understand, of course, that money rates must be freed from the grip of cheap-money policies *if normalcy in the sense of a free-enterprise economy is to be attained*, and that for everyone who desires return to such normalcy, the liberation—or reconstruction—of a free-money market must be a point of prime importance. But this does not alter the fact that a restrictive credit policy would at present produce consequences quite different from those that the old theory of credit policy would lead us to expect. Accepting the latter without any qualification—for argument's sake—we cannot help observing that it was to apply to a world in which everything was entirely flexible and which was not afraid of what I may term remedial recessions. In such a world, an increase in interest rates was supposed to reduce the volume of operations, money wages, and *employment*. Surely these effects would not materialize at present and, if they did, they would immediately provoke government action to neutralize them. In other words, credit restrictions would at present achieve little beyond increasing the difficulties of business. Even restrictions of consumers' credit would have this effect to some extent, though something could no doubt be done in this field.

b) Similar difficulties stand in the way of controlling inflation by means of increasing taxation—a no less orthodox remedy but which enjoys a popularity with modern economists that is denied to credit restriction. It is quite true that something might be accomplished by increasing taxes on consumption. In an inflationary situation this would even be good Keynesianism. But if it is the corporation tax and the higher-bracket income tax which is to be increased, the effect upon inflationary pressure would be small at best and might even be negative. For if the present rate of industrial progress is to continue and therefore the present rate of obsolescence of equipment is to continue, also, increasing resort would have to be taken to inflationary bank credit in order to make up for the decrease in the available non-inflationary means of finance. Alternatively, a decrease in those rates of progress and of obsolescence would indeed decrease inflationary pressure for the moment but increase it in the long run.*

*I have no difficulty in understanding why this argument does not impress our radical

c) The third household remedy consists in direct controls: price fixing, priorities and the like, including subsidies. Why they are so popular with certain sectors of public opinion is a question that need not concern us. For the bureaucracy in particular their reintroduction would spell reconquest of ground that has been lost; for the trade unions it would spell a decisive advantage in the campaign for the conquest of the profit item; for business it would mean the loss of the line of retreat that is open to it so long as most, if not all, attacks upon it can be partly, if not wholly, parried by price adjustments. Or at least, it would make this retreat dependent upon government permission—which there is no reason to believe would be granted for purposes of securing means for improving the productive engine. In other words, price control may result in a surrender of private enterprise to public authority; that is, in a big stride toward the perfectly planned economy.

[At this point Joseph Schumpeter stopped in the writing up of his notes. Those who heard the address will remember that at the end there was little time and he summed up very briefly, going back to his opening remarks on the relevance, for the economic future of this country, of the present state of inflationary pressure, under existing political conditions. Some of the points touched upon with "desperate brevity" may be found developed at greater length in the second American edition or in the third English edition of *Capitalism, Socialism and Democracy* and in an article, "There Is Still Time to Stop Inflation," which appeared in the *Nation's Business* for June, 1948.

The following paragraphs are reconstructed from memory and from the notes used for the address.]

I do not pretend to prophesy; I merely recognize the facts and point out the tendencies which those facts indicate.

Perennial inflationary pressure can play an important part in the eventual conquest of the private-enterprise system by the bureaucracy—the resultant frictions and deadlocks being attributed to private enterprise and used as arguments for further restrictions and regulations. I do not say that any group follows this line with conscious purpose, but purposes are never wholly conscious. A situation may well emerge in which most people will consider complete planning as the smallest of possible evils. They will certainly not call it socialism or communism, and they will presumably make some exceptions for the farmer, the retailer, and the small producer. Under these circumstances, our capitalist, free-enterprise system as a scheme of values, a way of life, and a civilization may not be worth bothering about.

Whether the American genius for mass production on whose past performance all optimism for this way of life rests is up to this test, I

friends. But I confess that I find it difficult to understand the position of some excellent economists who are quite above any suspicion that they would welcome the failure of our industrial engine to work on successfully and who nevertheless list reduction in industrial investment among the acceptable means for counteracting inflation, both in this country and in England. Incidentally, it should be noticed that the opinion of some conservative stalwarts that high and highly progressive taxation might promote, and that reductions in taxation (at the right spots) might decrease, inflationary dangers does not necessarily merit all the sneers it usually gets.

dare not affirm, nor do I dare to affirm that the policies responsible for this situation might be reversed.

Marx was wrong in his diagnosis of the manner in which capitalist society would break down; he was not wrong in the prediction that it would break down eventually. The stagnationists are wrong in their diagnosis of the reasons why the capitalist process should stagnate; they may still turn out to be right in their prognosis that it will stagnate—with sufficient help from the public sector.

LONG-TERM ECONOMIC TRENDS

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I

Let me begin these remarks by assuring you that I make no apology for speculating about the future of private enterprise. Men cannot avoid making many decisions which assume certain trends. It is useful, therefore, to be definite about one's expectations and about one's reasons for them. Certainly the more definite one is, the more quickly one will become aware of the failure of certain trends to develop. And clear recognition that certain trends are under way and are likely to continue is the first step in attempting to stop those trends that one dislikes. Hence predicting what seems likely to happen may help prevent it from happening and thus help to make one's forecast turn out to be false. Finally and most important, examination of apparent long-term trends is a good way of gaining insight into the institutions and activities of the present.

My remarks will deal only with the United States and will assume that the country escapes a major war. I shall touch on three somewhat different subjects. First, I shall discuss very briefly the probable trend of certain important economic series and kinds of behavior. Second, I shall speculate about the behavior of the economy as a whole. Finally, I shall discuss prospective changes in the basic institutions of the economy and in the organization of decision making.

II

What are likely to be the principal trends in economic series and in specific characteristics of the economy during the next generation? I have selected seventeen trends for brief comment—partly because of their importance and partly because the reasons for expecting them seem to me to be especially convincing.

1. The rate of technological progress will be rapid—probably more rapid than in the past several generations. This is probably the safest of all the predictions which I shall make. The number of people engaged in technological research seems bound to increase rapidly, the volume of accumulated knowledge which is available for use in discovering new knowledge is larger than ever, and the pressure to make discoveries for both business and military reasons is greater than ever. Hence the prospect is bright that output per man-hour will rise a little faster than in the past.

2. The rate of population growth will be fairly slow—faster than

in the thirties but not as fast as in the forties. There is no likelihood of a return to the large families of a century or less ago. The outlook, however, is that size of the average family will not become as small as seemed likely a few years ago. Twenty years or more hence the extraordinary population increase of the forties will boost the number of births.

3. Raw materials are likely to be discovered and new raw materials developed more slowly than capacity to convert raw materials into finished goods is improved. In other words, raw materials are likely to be more expensive relative to finished products than they were in the twenties and the thirties. I realize that this is a highly speculative statement and that similar forecasts by economists during the last century and a half have turned out to be wrong. Certainly the development of important new raw materials in the last century is most impressive. Nevertheless, when one contemplates the enormous rate at which industry now consumes raw materials, one cannot avoid the expectation that metals and fuels are likely to be scarcer relative to the demand for them than in the recent past. In the next 30 years, for example, the industries of the United States will consume considerably more raw material than in the past 150 years.

4. The number of staff officers of enterprises will continue to grow relative to the number of line officers. The rapid growth of staff relative to line has been one of the revolutionary changes in business methods during the last fifty years. Indeed, prior to 1900, business had virtually no staff officers—it operated almost solely with line officers. The economic consequences of the rise of the staff are important, and I shall call attention to them presently.

5. The ownership of the corporate part of business, which is now restricted to less than one-tenth of the adult population, will be somewhat broader than it is today, but there is no present reason to believe that the stockholders in industrial corporations will soon become a high proportion of the population. Selling stock to the public is an expensive way of raising capital—by far the most expensive of all ways. Most corporate managements fail to appreciate the need for much broader ownership of American corporations. They are misled by comparing the number of their stockholders with the number of their employees into believing that the corporations are widely owned. Most individuals are reluctant to put their savings into corporations. They prefer small enterprises which they themselves operate or residences which they themselves occupy. In 1947 and 1948, for example, individuals invested six times as much in the plant and equipment of unincorporated enterprises as in the stocks and bonds of corporations.

As a matter of fact, the stocks of most corporations are too risky to be a suitable investment for persons of modest means. A way is needed by which tens of millions of persons of modest means can become owners of corporations. The investment trust is the obvious answer, and I expect to see investment trusts achieve great importance in the next generation. Most investment trusts, however, will buy shares in only well-established enterprises—though specialized trusts to back risky ventures may be developed. At any rate, the riskiest concerns will be owned by a few persons—usually by the persons who started them and to whom the enterprise means a job.

6. The environment in which business is conducted will continue to be mildly hostile to the pursuit of profit. The community in which the modern economy operates is a new kind of society—little more than a century old. It is distinguished by the fact that nearly four out of five of those who work for a living are on someone else's pay roll. There have been societies made up primarily of the self-employed and societies made up primarily of slaves and serfs. Only in modern times, however, have there emerged societies composed primarily of free employees. In such a society government will be in the hands of groups which view the corporate part of business with more or less suspicion. Consequently, it will be better politically to find fault with the shortcomings of business than to encourage enterprise. I believe that this will be true even though corporations may have some success in increasing the proportion of the community that owns their shares and in breaking down the view that the corporate part of industry is something more or less apart from the community.

A principal reason for my belief that environment will be mildly unfriendly to business, especially to corporate business, is that the community will be preoccupied over how income is divided. That will limit the interest of most people in encouraging private investment. At one time I believed that the self-interest of unions would lead them to support public policies which encourage investment. This may eventually happen, but the date does not seem to be near. The motives which cause the accumulation of investment-seeking funds are various, but most personal savings are used to buy concrete things—houses, for example, and plant and equipment for unincorporated enterprises. These uses, both in recent years and before the war, far exceed the purchases of government or corporate securities or of private life insurance, and the increases in savings accounts or cash.¹ Hence it appears that most saving is not done because of a desire for security but because of a desire

¹ The volume of the principal nonliquid and liquid forms of gross investment by individuals in 1939, 1947, and 1948 was as follows:

for larger income. Furthermore, it appears that most of the demand for future income in terms of present income is an elastic demand; so that the way to increase the volume of investment and to stimulate the formation of capital is to reduce the price of future incomes. Sooner or later, I suppose, the community is bound to discover this fact and to seek to raise its standard of living by encouraging investment. That would be a revolutionary discovery and would quickly cause the environment to become friendly to enterprise. All persons who believe that the course of history is determined by economic self-interest—all Marxists, for example—must believe that the community will eventually adapt its public policies to the fact that the demand for future income is elastic. Unfortunately, however, economic self-interest has only a limited and often a tardy effect upon men's political views and, therefore, upon the course of history. I see no immediate prospect that the community will seek to raise its standard of living by a carefully planned policy of encouraging private investment.

7. The need for investment-seeking funds will represent a smaller part of the net national product than in the past. This result will be produced by the slower rate of population increase. In the past, over half of private investment has been necessitated by the rate of population increase. If capital per worker and output per man-hour increase about as rapidly as in the past, if the labor force increases in the next generation by about one-fourth, and if the length of the work week gradually declines, roughly 6 per cent of the national product will need to be devoted to increasing plant, equipment, and inventories. Between 1879 and 1929, about 12 per cent of the national product was used for these purposes.

8. The rate of corporate saving, which during the last three years has been as large as dividend payments and in some years larger than dividend payments, will be considerably smaller than during the last

	NONLIQUID		
		(billions)	
	1939	1947	1948
Nonfarm dwellings	\$2.9	\$ 6.2	\$ 8.0
Plant and equipment, nonfarm	1.4	4.8	4.5
Plant and equipment, farm	1.2	3.7	4.9
Total	\$5.5	\$14.7	\$17.4
	LIQUID		
Currency and deposits	\$3.1	\$ 4.1	—
Insurance reserves, private	1.7	3.7	\$ 3.5
U. S. securities	0.1	2.4	1.3
State and local securities	— .23	.4	1.2
Corporate securities	— .24	1.0	1.9
Savings and loan deposits	.06	1.2	1.25
Total	\$4.4	\$12.8	\$ 9.15

several years. The recent high rate of corporate saving has been caused by the accumulated need of corporations for plant and equipment.

9. The prospective ratio of personal saving to disposable income seems to me to be quite uncertain. Several more years' experience are needed to shed light on this matter. Large incomes will be a smaller source of saving than before the war. Persons in the middle- and low-income brackets seem to save primarily as a result of a decision to invest—a decision to buy a house or, in the case of owners of unincorporated enterprises, to buy plant, equipment, or inventories. About two-thirds of gross personal saving is of this type. Such saving does not create an investment problem. The crucial question is whether the volume of liquid saving that represents about one-third of gross personal saving will rise or fall. At present it is lower relative to disposable income than before the war, but this low ratio may simply reflect the accumulated needs of individuals for tangible goods.

10. Bank credit will be less important as a source of funds for business than it was before the Great Depression. The smaller need of business for bank credit will be the result of a slower rate of population growth. In the past, the demand of enterprises for capital has usually exceeded the willingness of the community to provide them with investment-seeking funds. Hence, enterprises have used bank credit as a device to impose upon the community a higher rate of saving than it preferred to have. It is possible that the need of enterprises for bank credit will be sustained to some extent by a drop in the ratio of liquid savings to personal incomes. I believe, however, that corporations will have some success in increasing the proportion of individuals who buy corporate securities.

11. The policies of the government will be inflationary. Spending is more attractive to the politicians than taxing. Hence democracies which do not accept the philosophy of *laissez faire* are virtually certain to be in the "red" most of the time. The cold war will impose substantial demands on the federal government for the indefinite future, and various pressure groups are becoming better organized to press their requests for expenditures. The public debt will slowly rise. A moderate rise in the public debt during the next thirty years will probably be necessary to permit the money supply to rise as rapidly as the physical production of goods. Hence a moderate rise in the debt may be described as antideflationary.

12. Union membership will grow, and upward pressure on wages will be strong. The principal unorganized groups at the present time are the employees in retailing and wholesaling, the white-collar workers, and government employees. Organization will grow in these three areas. The upward pressure on wages will probably not be as strong as it has

been during the last three years. As unions become better established, there will be less competition between them and they will be under less pressure to justify their existence to their members by getting large wage increases. Nevertheless, the upward pressure on wages will be stronger than during the first quarter of the twentieth century or during most of the nineteenth century. Consequently, money wages will rise faster than output per man-hour. This fact is likely to be an important influence on fiscal policy.

13. The more or less chronic deficit in the budget of the government and the diminishing dependence of private business upon short-term bank credit will mean a revolutionary change in the monetary system of the country. For nearly a century prior to 1929, the principal source for the increase in the money supply was the rise in short-term private debt. A worse way of increasing the country's money supply could scarcely be devised. This method of providing money made the economy highly susceptible to booms and contraction. The development of this unfortunate monetary system, based largely upon short-term private debt, reached its culmination in 1929 when commercial bank loans were 38 per cent as large as the net national product for the year and were the source of about two-thirds of the money supply.

From now on, the principal sources of an increase in the money supply will probably be a slow increase in the public debt. This, as I have said, is a revolutionary change in the monetary system, comparable in importance to the change which occurred when short-term private debt superseded metal mining as the principal source of new money. It is, of course, a change for the better because it replaces a monetary system which helped make the economy unstable with one which helps make it stable.

14. The increase in the money supply will be less rapid than in the past. In the last twenty years the money supply (represented by money outside of banks and by all bank deposits except interbank) has trebled. Between 1900 and 1929, it increased over sixfold and in the thirty years ending in 1900, it increased about fivefold. In the twenty years between the two great wars (1920 to 1939) it increased by 50 per cent. In the absence of war, I do not expect the money supply to increase as rapidly as during the last twenty years. If output rises by 2 per cent per man-hour per year, if the labor force rises in the next thirty years to 76 million, and if the length of the work week drops by one-fourth, the net national product by 1980 will be about 423 billion dollars in terms of present prices. If the velocity of circulation ceases to drop but does not rise, an increase of about 129 billion dollars in the money supply will be needed merely to prevent a drop in prices. If the growth in the money supply were no greater than this, it would

be the slowest rise in the history of the country. The increase in the money supply will have to be large enough, as I shall explain in a moment, to make possible a slow rise in prices. Even so, the rise in the money supply will be slower than in the past.

I suspect that the deficits in the government budgets and imports of gold, together with a moderate increase in commercial loans, will be large enough to bring about the needed increase in the money supply. If they are not, other sources will have to be found. Let us hope, however, that the community does not rely for an increase in its money supply to any great extent upon the growth of short-term debt, originating either from business borrowing or from consumer borrowing.

15. The course of prices over the long-term will be slowly upward. The basic reason for this conclusion is my belief that under free collective bargaining the price of labor will increase faster than physical output per man-hour. I do not believe that employers are strong enough to prevent the price of labor outrunning productivity, unless they are spurred by strong public opposition to rising prices. If employers should be able to prevent trade unions from raising the price of labor faster than the managers and engineers are able to increase output per man-hour, the likelihood of rising prices would be greatly diminished though not eliminated. There would still be the possibility that deficits in the government budgets would be large enough to produce a rise.

16. The structure of business will continue to be characterized by a few large concerns in each industry that produce most of the output of the industry and by a considerable number of small competitors of the large concerns. This does not mean that the small concerns will have difficulty in holding their own with large ones. The pattern of a few large concerns existing side by side with many small ones is found in a wide variety of human activities. Twelve large unions, or 6 per cent of all unions, have half of the union members in the United States. About 5 out of over 223 Protestant churches in this country have over half of the membership in all Protestant churches. Similar concentration is found in a wide variety of activities. There seems to be a fundamental social law which may be expressed as follows: The responsibility for events is concentrated. If a suggestion system is put into a plant, about half of the suggestions will be made by about one-tenth of the employees. Likewise, about one-tenth of the employees will cause one-half of the accidents or one-half of the absenteeism. A small proportion of library users draw most of the books from the library. A few people write most of the letters to newspapers.

Just as the preferences of people cause most of them to belong to a

few large churches or unions, so their preferences will cause most of them to buy one of few makes of cigarettes, breakfast foods, cars, or soap. Consequently, in industry after industry a small percentage of companies will continue to produce one-half to nine-tenths of the goods sold. I do expect the country in the next decade or so to do a considerably better job of improving the quality of business births, in reducing the infant mortality among business concerns, and in helping new enterprises grow. The schools of business will give far more attention to these matters in the future than in the past. And purchasing departments may be expected to show greater interest in increasing and improving their sources of supply. The result will be some increase in the proportion of business done by the smaller concerns. Nevertheless, the essential pattern of production, with a few large concerns in each industry doing most of the business, will continue, especially in those industries where concerns sell under their own brand names to ultimate consumers.

17. The organization of production will continue to be messy. By this I mean that different kinds of output will not fall neatly into different industries and enterprises will not be confined to one and only one industry. Automobile companies will continue to make refrigerators and locomotives, flour milling companies to make pie crust and electric irons, manufacturers of automobile parts to make chairs, heating plants, and other household equipment. The organization of labor will also continue to be messy. Unions will not limit their membership in an orderly fashion to the workers in a given industry or occupation. This messiness in the organization of production and of workers is due to various causes, but particularly to changes in technology and markets. Some people envisage the development of a sort of syndicalist organization of production with associations of employers in various industries and the unions exercising control over the industry. The messiness of the organization of production and of labor would alone be a strong obstacle to the rise of syndicalism.

III

Let us shift attention to the behavior of the economy as a whole. The two questions most frequently asked are: (1) will demand grow rapidly enough to maintain a high level of employment, and (2) will the movement of business be wavelike and will the economy continue to be somewhat unstable?

Let us consider first whether demand is likely to grow rapidly enough to sustain a high level of employment. One of the most remarkable characteristics of the economy has been its capacity to increase incomes and expenditures about as fast as it increased physical

production. This is shown by the fact that during the last century the movement of prices was upward in more years than it was downward. In 1940, the wholesale price level was about 30 per cent higher than in 1850. Underlying the capacity of the economy to raise money incomes as rapidly as physical production has been its success in raising the quantity of money. This increased about 143 fold between 1850 and 1939. In the meantime the national output (expressed in constant dollars) increased a little more than 26 fold.

The demand by enterprises for agents of production has usually been greater than the capacity to supply them. Until about 1880 the United States imported capital on balance. Until immigration was checked by law, the economy also imported labor in large quantities, and it still imports labor in small quantities. The community as a rule has been unwilling to supply industry with investment-seeking funds in the volume desired. Hence enterprises have used bank credit to force upon the community a higher rate of saving than it was ready voluntarily to accept.

Many people are strongly pessimistic about the capacity of the economy to increase production fast enough to maintain a high level of employment. One reason for pessimism is that the extraordinarily strong demand for agents of production during the nineteenth century was based in large measure upon the fact that a vacant continent was being occupied. Hence undeveloped natural resources produced a strong demand for both men and equipment. A second reason for pessimism is that the employees are organized far more effectively than ever before to maintain a rising supply price for their services. As I have pointed out, employers as a general rule are not strong enough to prevent unions from raising the supply price for labor faster than technological progress raises output per man-hour. A third reason for pessimism is that the political environment is likely to be somewhat unfavorable for enterprise. Certainly the opposite was true in the nineteenth century.

The prospect for increasing incomes fast enough to maintain a high level of employment impresses me as good—though I think the economy has some difficult transitions ahead. In the first place, a drop in the rate of investment from the recent high levels can be offset by a drop in the propensity to save. Nearly half of the net saving of the community is plowed-back earnings of corporations. A substantial part of personal savings is plowed-back earnings of unincorporated enterprises. The proportion of earnings retained in business would quickly drop in response to a decrease in investment opportunities. The fall in the rate of saving would not immediately and completely prevent a drop in the rate of spending, but in the course of time the propensity to save would decline substantially in response to a decrease

in investment opportunities. In the second place, the tendency of unions to raise the supply price of labor faster than managers increase output per man-hour will be offset, as I have indicated above, by a rise in prices. I do not know whether this will occur in the absence of special steps, but if it does not, the steps will be taken. In the third place, it is probable that a minority of concerns and of individuals who are responsible for most of the enterprise in the community are affected in only moderate measure by public policies which are unfriendly to business. It is curious that economists, who have been inquiring into the nature and causes of the wealth of nations for two centuries have not made it a point to find out very much about enterprise—what kinds of people and concerns are enterprising and what conditions are favorable to enterprise. It is a safe assumption, however, that about one-tenth of the 4 million business concerns outside of agriculture provide about half of all the real enterprise—that is, about half of the real drive to expand, to improve, to make innovations. It is also a safe assumption that about one-tenth of the 60 million workers provide about half of the enterprise provided by individuals. The drives that motivate the enterprising minority among concerns and individuals are probably too strong to be greatly deterred by mildly unfavorable public policies. Within the next decade or so, I believe that economics will direct attention to the neglected topic of enterprise and that economists and others will gain insight into what conditions determine the amount of enterprise in the community. Acquisition of that knowledge should greatly increase the capacity of the economy to provide employment. Finally, there is always in the background the possibility that the community may discover that the demand for future income in terms of present income is elastic and that it will encourage investment by helping to make future income available on more favorable terms.

IV

Will the movement of business continue to be wavelike and will the economy continue to be unstable? I believe that the wavelike movement of business, which has been so characteristic of the economy during the nineteenth century and the first part of the twentieth century, will be considerably moderated. Hence the problem of business cycles will be less important to the community and of much less interest to economists. This gain in the stability of the economy will be partly a result of experience and partly a result of improvement in economic institutions. For example, it is safe to say that banks will never be permitted to fail in such large numbers as they did in 1929 and 1932. The community has now learned by experience the wide repercussions of banking difficulties. Hence any tendency for banks to fail will be combated

with more boldness and vigor than was done during the early years of the Great Depression.

Important changes have also been made in the economic institutions of the country. Bank deposits have been insured up to a certain point, about seven out of ten of all employees in American industry are now covered by unemployment insurance, the dangerous short-term second mortgages have been pretty much eliminated, and the Federal Reserve Board has been given authority to control stock market credit. The enormous growth of the staff in business and the prospect that the environment will be more or less hostile to business will tend to make periods of expansion less buoyant than in the nineteenth century. As I have indicated, the increase in staff means that business is far better organized than ever before to investigate new ideas and new proposals. In short, it is much better organized to say "no." Hence business will be much less inclined than ever before to accept optimistic views of the short-run outlook and, even to the extent that it accepts them, to act upon them. A more or less hostile attitude of the community toward business will tend to prevent periods of expansion from becoming buoyant. If cyclical upswings are less pronounced than in the past, cyclical downswings will also be less pronounced. Finally, the economy has gained stability from the revolutionary change which has recently occurred in its monetary system; that is, the reduction of short-term private debt to secondary importance as a source of money supply.

V

What will happen to the organization of the American economy? Economic institutions are constantly evolving. What comes after capitalism? Is it socialism, a planned economy, or something else?

My vision seems to be poor. I do not see socialism or a planned economy, and yet I know that evolution is steadily occurring. Perhaps the difficulty is that there are several varieties of capitalism and that they are not easily distinguished. Let us look first at the reasons why neither socialism nor a planned economy is immediately ahead and then let us speculate about what is just ahead.

One must expect, I think, a gradual increase in the number of free or nearly free services provided by government. This trend has been going on for generations and it will be encouraged, not discouraged, by the general rise in per capita output. But an increase in free services is not socialism. Socialism in the twentieth century faces the tremendous disadvantage of being in actual operation on a considerable scale in several countries. Hence it is a reality, not a Utopia. Its limitations and its inadequacies are made evident by actual practice. Conse-

quently, I do not expect to see the public ownership of industry spread except where there is some special reason for it. Enterprises connected with regional development and with atomic energy will be publicly owned and may also be publicly operated. In some declining industries public ownership may bail out private enterprise. The railroads may end up in public hands for this reason. Finally, public ownership may become important in industries which need to be subsidized. Housing is an example. But the economy which develops will not by and large be socialist.

Nor is a planned economy likely. There are two kinds of planned economy: (1) an economy in which a national economic budget is planned and enforced and (2) one in which activities are guided by a large and consistent body of economic policies. Certainly if planning of the first sort is developed, one would expect it to grow up first in rather small countries with a limited number of industries and with the necessity of rationing foreign exchange. The United States offers about the least favorable conditions for the development and enforcement of a national economic budget that can be found in the world today. There is no compelling necessity for the enforcement of a national economic budget, such as would exist if foreign exchanges were scarce. The extraordinary variety of industries, the rapidity of technological change, and the enormous volume of highly optional expenditures made by consumers who are thus enabled to shift quickly from one good to another create extremely difficult conditions for operating a national economic budget. A plan would be obsolete before the year was over and by becoming obsolete would cause many difficulties. Even quarterly revisions would not make it work. What plan could provide for a sevenfold increase in consumption of frozen vegetables in a decade or a threefold increase in consumption of frozen fruit juice within several years?

As for planning in the second sense, one may be sure that the exigencies of politics will prevent consistent economic policies. The only consistency in public policies is that they appeal to voters or to various groups of voters. They represent political planning, not economic planning.

Although the development of a truly planned economy is not likely, more and more economic decisions will be made by various agencies of government. The number of prices which are affected more or less directly by the decisions of government will slowly increase. I see no prospect, for example, of a substantial drop in the number of prices which are subject to government-imposed ceilings or floors. The level of the ceilings and floors, of course, will be the subject of considerable controversy. Subsidies of one kind or another will probably increase

rather than diminish. Transfer payments of various kinds will be a larger part of personal incomes. The number of highly regulated industries will probably increase. Over-the-road trucking, radio, investment banking, and air transport are recent additions to the number of highly regulated industries. There is at least a good prospect that two more industries—consumer credit and agriculture—will be added to the list.

The important fact, however, is that the slow growth of centralized decision making does not mean that the economy is about to lose its most unique and most valuable characteristic; namely, decentralized decision making. The decisions about consumption made by tens of millions of consumers and the decisions about production made by millions of business enterprises will continue to be the most important activities in the economy. Although these decisions will be made within a slowly growing framework of public policies, the economy will continue to be guided in the main by the preferences and the knowledge of millions of people who are close to the facts. There will still be ample opportunity for business concerns to develop new markets, to develop new processes, and to adapt themselves to new conditions in their own way. These are the characteristics of the economy which make it extraordinarily adaptable, which give it remarkable capacity to generate innovations, which provide it with dynamic drive.

Decentralized decision making has proved in this country to be a hardy plant. It has shown great capacity to survive in a changing world. Perhaps its greatest strength is the excellent chance which it gives to minority views on business policy or technological policy. No matter how many enterprises there may be in an industry, let only one management be convinced that an idea is good, and the idea will be tried out. I see no prospect that decentralized decision making is about to suffer a serious drop in importance in the United States. The American economy, of course, will continue to develop many new institutions during the next generation as it has done in the last one, particularly new institutions in the capital market. Nevertheless, it will fundamentally remain what it is today—an economy in which tens of millions of persons work out their own destinies with a good deal of help and guidance but, in the last analysis, in their own way. That is the reason why I am confident that the economy will remain strong and progressive, guided to some extent by public policies but driven forward by the innovations from millions of enterprises and by the restless ambitions of tens of millions of producers.

DISCUSSION

MAXWELL OBST, *Rapporteur*

At the conclusion of the prepared papers, there was open discussion from the floor.

Dr. Per Jacobson (Bank for International Settlements, Basle, Switzerland) was the first discussant. He stated that throughout the meetings, he had observed a misconception as to the state of current economic thinking in Western Europe. The opinion was apparently widespread that there was a substantial unity of ideas in the European countries as to planning, socialism, and the conduct of foreign trade. This, he said, is definitely not the case. There is a sharp schism on the Continent between the advocates of a free economy and the planners. In France, Belgium, Switzerland, and Italy there is today a freely working price system; the cheap money policy has been discarded and credit restricted, with rapid and extraordinary consequences. For example, within the past year in Italy the domestic market has been filled with goods, exports have risen considerably, and the monetary reserves of the Bank of Italy have risen by 250 million dollars. In France there have been similar developments, and the Bank of France has accumulated nearly 150 million dollars, as well as some sterling balances. One most encouraging indication of greater stability in France was the fact that during the political crisis of October, 1949, there was no loss of monetary reserves by the central bank—the customary result. In the field of foreign trade, the severe current account deficit of 1948 has been transformed into a small export surplus.

What was the reason for the shift in emphasis towards free economies which has had such marked effects in less than a year? First of all, said Dr. Jacobson, there were the writings of economists such as Professors Reynaudi and Frere, in Italy and Belgium, respectively. Professor Erhard in Germany was another who called for the establishment of free markets and hard money. Secondly, it is a fact that authoritarian controls over economic activity were, on the Continent at least, associated with the rule of the fascists and nazis. The downfall of the totalitarian governments led to a demand for the discard of their methods of control. Thirdly, there was the growing realization that controls do not work well among Latin peoples. A fourth, and most important, consideration was the example of other economies which were operating under efficiently administrated controls, and yet were in exceptionally weak positions. The failure of convertibility of the pound in July, 1947, and the strict austerity in England made a great impression on the Continent. The example of Sweden was also quite effective in changing economic opinion. Here was an apparently rich country, with more forest than Finland, more iron ore than Norway, and more agricultural resources than Denmark, and without any war damage, yet involved in a loss of foreign reserves of three billion Swedish crowns and the introduction of strict trade controls. Still another important factor was the failure of an American depression to materialize, an event which had been stoutly predicted by the planning contingent. Finally, the role of the Catholic Church must be

emphasized. In Italy, Germany, and France, the clergy played a most important part, acting as allies to the liberals (in the old-fashioned sense of the word). Thus the exigencies of the situation made rather strange bed-fellows.

The result of this transformation has been a strikingly rapid improvement, most visible, of course, in Germany. It underlines the extreme importance of appropriate credit policies. In France, Italy, and Belgium, deficits in the public budget have continued. But the strict credit policy has nonetheless had a very strong effect. In France and Italy credit rates are very high—from 6 to 8 per cent. The results in France have thus far not produced any increase in unemployment. In Dr. Jacobson's opinion, the problem of unemployment in Germany is a result of the influx of refugees; in Italy it is a question of excessive population with insufficient resources.

What have been the political consequences of the past year's developments? Elections in Belgium, Italy, and Germany have all reflected a swing towards conservatism; despite the increase in unemployment, the labor and communist parties lost much ground.

The important prerequisite for further economic progress has been achieved on the Continent: a return to a monetary balance. The latest proposals to reduce the quantitative restrictions on intra-European trade by 50 per cent is an important forward step. However, in this field the old enemy of vested interests is again emerging as a serious stumbling block.

In Germany, people are demanding a large investment program to counter the unemployment. The battle is between the defenders of the monetary balance and the clamant call for greater investment. The latter view seems to Dr. Jacobson to be generally approved in the United States.

Dr. Jacobson feels that we may yet see, within a very short time, a further improvement, perhaps even to the interconvertibility of currencies—possibly on the Continent alone, excluding sterling. But it must be remembered that the greater part of the trade of the Continent is with Britain and the Overseas Sterling Area, so that any improvement on the Continent would be very vulnerable without the inclusion of sterling. The most important difficulty facing the United Kingdom, and preventing her from a greater liberalization of trade, is the existence of the large sterling indebtedness. The substantial release of these blocked balances to India and other underdeveloped areas has meant that all of the Marshall Aid received by the United Kingdom has been siphoned through the British economy and has therefore contributed very little to Britain's domestic needs.

Professor Seymour Harris stated that he agreed with a great deal that had been said in the course of the meeting, but that his function was obviously to heckle his colleagues from Harvard. He wished to remind Professor Slichter of some past problems. In the relatively recent past a serious national problem had been that the United States had too little rather than too much debt. He was pleased to note that Professor Slichter had said explicitly that he agreed to increases in the public debt in appropriate circumstances.

Professor Harris then offered some reassurance to Professor Schumpeter as to the prospects for socialism in the United States. In the United States, he

said, the proportion of total income taken by the government has risen very slightly, if at all, from 1929 to the present. He pointed out also that the New Deal had failed to achieve any significant degree of egalitarianism; the inequality of income distribution is about the same as it was in 1929. As to the supposed defects of our monetary system, he felt that, in comparison with (say) 1844, when our monetary system was placed in a strait jacket, the present one is relatively free and supplies flexibility for changing conditions.

Professor Otto Nathan expressed surprise that the current European situation had received such scant attention during the meetings. He thought that this was regrettable. He felt, further, that the remarks made by Dr. Jacobson did not give a complete picture. Specifically he felt that those in close touch with European developments would agree that monetary developments alone are not an adequate and sufficient test of what is happening. Moreover, changes in the reserve positions of various central banks are no test of recovery. He recalled the fact that Italy had been mentioned as an example. Although it is correct, he said, that the gold reserve has risen, it is also true that there is appalling poverty in Italy. Another important consideration is that the distribution of income has become more unequal in all the *laissez faire* economies of Western Europe. Finally, he thought that to discuss developments in Western Europe while ignoring the United Kingdom was impossible. The great expansion of exports by the British and their general economic recovery were certainly pertinent to any analysis of European developments.

In rebuttal to Professor Nathan, Dr. Jacobson said that he was generally in agreement with what the previous speaker had added. He stated also that in his previous remarks he had omitted certain aspects because he only had some five minutes to speak. Moreover, he had briefly discussed some of the problems facing the United Kingdom.

What he wanted to emphasize was that anyone who has lived through the inflationary period in postwar Europe realizes the tremendous importance of confidence in the monetary unit. Savings are held in the form of money and in these abnormal times savings are terribly important for reconstruction. Confidence and progress cannot be achieved without monetary balance. Without such balance, it is impossible to persuade the peasants to produce for the market. Such a balance is therefore a precondition for economic recovery and has been achieved throughout Europe generally—although it has been done on the Continent on lines other than those used in the United Kingdom.

U.S. FOREIGN INVESTMENT IN UNDERDEVELOPED AREAS

THE DISTRIBUTION OF GAINS BETWEEN INVESTING AND BORROWING COUNTRIES¹

By H. W. SINGER
United Nations

International trade is of very considerable importance to underdeveloped countries, and the benefits which they derive from trade and any variations in their trade affect their national incomes very deeply. The opposite view, which is frequent among economists, namely, that trade is less important to the underdeveloped countries than it is to industrialized countries, may be said to derive from a logical confusion—very easy to slip into—between the absolute amount of foreign trade which is known to be an increasing function of national income, and the ratio of foreign trade to national income. Foreign trade tends to be proportionately most important when incomes are lowest. Secondly, fluctuations in the volume and value of foreign trade tend to be proportionately more violent in that of underdeveloped countries and therefore *a fortiori* also more important in relation to national income. Thirdly, and *a fortissimo*, fluctuations in foreign trade tend to be immensely more important for underdeveloped countries in relation to that small margin of income over subsistence needs which forms the source of capital formation, for which they often depend on export surpluses over consumption goods required from abroad.

In addition to the logical confusion mentioned above, the great importance of foreign trade to underdeveloped countries may also have been obscured by a second factor; namely, by the great discrepancy in the productivity of labor in the underdeveloped countries as between the industries and occupations catering for export and those catering for domestic production. The export industries in underdeveloped countries, whether they be metal mines, plantations, etc., are often highly capital-intensive industries supported by a great deal of imported foreign technology. By contrast, production for domestic use, specially of food and clothing, is often of a very primitive subsistence

¹ The author wishes to acknowledge help and advice received from many friends and colleagues; in particular Mr. Henry G. Aubrey, Dr. Harold Barger, of the National Bureau of Economic Research, Dr. Roberto de Oliveira Campos, of the Brazilian Delegation to the United Nations, Dr. A. G. B. Fisher, of the International Monetary Fund, Professor W. Arthur Lewis, of the University of Manchester (England), and Mr. James Kenny. He also had the inestimable advantage of a discussion of the subject matter of this paper in the Graduate Seminar at Harvard University, with Professors Haberler, Harris, and others participating.

nature. Thus the economy of the underdeveloped countries often presents the spectacle of a dualistic economic structure: a high productivity sector producing for export coexisting with a low productivity sector producing for the domestic market. Hence employment statistics in underdeveloped countries do not adequately reflect the importance of foreign trade, since the productivity of each person employed in the export sector tends to be a multiple of that of each person employed in the domestic sector. Since, however, employment statistics for underdeveloped countries are notoriously easier to compile than national income statistics, it is again easy to slip, from the fact that the proportion of persons employed in export trade is often lower in underdeveloped countries than in industrialized countries, to the conclusion that foreign trade is less important to them. This conclusion is fallacious, since it implicitly assumes rough equivalence of productivity in the export and domestic sectors. This equivalence may be safely assumed in the industrialized countries but not in the underdeveloped countries.

A third factor which has contributed to the view that foreign trade is unimportant in underdeveloped countries is the indisputable fact that in many underdeveloped countries there are large self-contained groups which are outside the monetary economy altogether and are therefore not affected by any changes in foreign trade. In industrialized countries, by contrast, it is true that repercussions from changes in foreign trade are more widely spread; but they are also more thinly spread.²

The previously mentioned fact, namely, the higher productivity of the foreign trade sector in underdeveloped countries might, at first sight, be considered as a cogent argument in favor of the view that foreign trade has been particularly beneficial to underdeveloped countries in raising their general standards of productivity, changing their economies in the direction of a monetary economy, and spreading knowledge of more capital-intensive methods of production and modern technology. That, however, is much less clearly established than might be thought. The question of ownership as well as of opportunity costs enters at this point. The productive facilities for producing export goods in underdeveloped countries are often foreign owned as a result of previous investment in these countries. Again we must beware of hasty conclusions. Our first reaction would be to argue that this fact further enhances the importance and benefits of trade to underdeveloped coun-

² A more statistical factor might be mentioned. Some underdeveloped countries—Iran would be an illustration—exclude important parts of their exports and imports from their foreign trade statistics insofar as the transactions of foreign companies operating in the underdeveloped country are concerned. This is a tangible recognition of the fact that these pieces of foreign investments and their doings are not an integral part of the underdeveloped economy.

tries since trade has also led to foreign investment in those countries and has promoted capital formation with its cumulative and multiplier effects. This is also how the matter is looked at in the economic textbooks—certainly those written by nonsocialist economists of the industrialized countries. That view, however, has never been really accepted by the more articulate economists in the underdeveloped countries themselves, not to mention popular opinion in those countries; and it seems to the present writer that there is much more in their view than is allowed for by the economic textbooks.

Can it be possible that we economists have become slaves to the geographers? Could it not be that in many cases the productive facilities for export from underdeveloped countries, which were so largely a result of foreign investment, never became a part of the internal economic structure of those underdeveloped countries themselves, except in the purely geographical and physical sense? Economically speaking, they were really an outpost of the economies of the more developed investing countries. The main secondary multiplier effects, which the textbooks tell us to expect from investment, took place not where the investment was physically or geographically located but (to the extent that the results of these investments returned directly home) they took place where the investment came from.³ I would suggest that if the proper economic test of investment is the multiplier effect in the form of cumulative additions to income, employment, capital, technical knowledge, and growth of external economies, then a good deal of the investment in underdeveloped countries which we used to consider as "foreign" should in fact be considered as domestic investment on the part of the industrialized countries.

Where the purpose and effect of the investments was to open up new sources of food for the people and for the machines of industrialized countries, we have strictly domestic investment in the relevant economic sense, although for reasons of physical geography, climate, etc., it had to be made overseas. Thus the fact that the opening up of underdeveloped countries for trade has led to or been made possible by foreign investment in those countries does not seem a generally valid proof that this combination has been of particular benefit to those countries. The very differential in productivity between the export sectors and the domestic sectors of the underdeveloped countries, which was previously mentioned as an indication of the importance of foreign trade to underdeveloped countries, is also itself an indication that the more productive export sectors—often foreign owned—have not become a real part of the economies of underdeveloped countries.

³ Often underdeveloped countries had the chance, by the judicious use of royalties or other income from foreign investment, to use them for the transformation of their internal economic structure—a chance more often missed than caught by the forelock!

We may go even further. If we apply the principle of opportunity costs to the development of nations, the import of capital into underdeveloped countries for the purpose of making them into providers of food and raw materials for the industrialized countries may have been not only rather ineffective in giving them the normal benefits of investment and trade but may have been positively harmful. The tea plantations of Ceylon, the oil wells of Iran, the copper mines of Chile, and the cocoa industry of the Gold Coast may all be more productive than domestic agriculture in these countries; but they may well be less productive than domestic industries in those countries which might have developed if those countries had not become specialized to the degree in which they now are to the export of food and raw materials, thus providing the means of producing manufactured goods elsewhere with superior efficiency. Admittedly, it is a matter of speculation whether in the absence of such highly specialized "export" development, any other kind of development would have taken its place. But the possibility cannot be assumed away. Could it be that the export development has absorbed what little entrepreneurial initiative and domestic investment there was, and even tempted domestic savings abroad? We must compare, not what is with what was, but what is with what would have been otherwise—a tantalizingly inconclusive business. All we can say is that the process of traditional investment taken by itself seems to have been insufficient to initiate domestic development, unless it appeared in the form of migration of persons.

The principle of specialization along the lines of static comparative advantages has never been generally accepted in the underdeveloped countries, and not even generally intellectually accepted in the industrialized countries themselves. Again it is difficult not to feel that there is more to be said on the subject than most of the textbooks will admit. In the economic life of a country and in its economic history, a most important element is the mechanism by which "one thing leads to another," and the most important contribution of an industry is not its immediate product (as is perforce assumed by economists and statisticians) and not even its effects on other industries and immediate social benefits (thus far economists have been led by Marshall and Pigou to go) but perhaps even further its effect on the general level of education, skill, way of life, inventiveness, habits, store of technology, creation of new demand, etc. And this is perhaps precisely the reason why manufacturing industries are so universally desired by underdeveloped countries; namely, that they provide the growing points for increased technical knowledge, urban education, the dynamism and resilience that goes with urban civilization, as well as the direct Marshallian external economies. No doubt under different circumstances

commerce, farming, and plantation agriculture have proved capable of being such "growing points," but manufacturing industry is unmatched in our present age.

By specializing on exports of food and raw materials and thus making the underdeveloped countries further contribute to the concentration of industry in the already industrialized countries, foreign trade and the foreign investment which went with it may have spread present static benefits fairly over both. It may have had very different effects if we think of it not from the point of view of static comparative advantages but of the flow of history of a country. Of this latter school of thought the "infant" argument for protection is but a sickly and often illegitimate offspring.

To summarize, then, the position reached thus far, the specialization of underdeveloped countries on export of food and raw materials to industrialized countries, largely as a result of investment by the latter, has been unfortunate for the underdeveloped countries for two reasons: (a) because it removed most of the secondary and cumulative effects of investment from the country in which the investment took place to the investing country; and (b) because it diverted the underdeveloped countries into types of activity offering less scope for technical progress, internal and external economies taken by themselves, and withheld from the course of their economic history a central factor of dynamic radiation which has revolutionized society in the industrialized countries. But there is a third factor of perhaps even greater importance which has reduced the benefits to underdeveloped countries of foreign trade-cum-investment based on export specialization on food and raw materials. This third factor relates to terms of trade.

It is a matter of historical fact that ever since the seventies the trend of prices has been heavily against sellers of food and raw materials and in favor of the sellers of manufactured articles. The statistics are open to doubt and to objection in detail, but the general story which they tell is unmistakable.⁴ What is the meaning of these changing price relations?

The possibility that these changing price relations simply reflect relative changes in the real costs of the manufactured exports of the industrialized countries to those of the food and primary materials of the underdeveloped countries can be dismissed. All the evidence is that productivity has increased if anything less fast in the production of food and raw materials, even in the industrialized countries⁵ but

⁴ Reference may be made here to the publication by the Economic Affairs Department of the United Nations on "Relative Prices of Exports and Imports of Under-developed Countries."

⁵ According to U.S. data of the WPA research project, output per wage earner in a sample of 54 manufacturing industries increased by 57 per cent during the twenty years,

most certainly in the underdeveloped countries, than has productivity in the manufacturing industries of the industrialized countries. The possibility that changing price relations could merely reflect relative trends in productivity may be considered as disposed of by the very fact that standards of living in industrialized countries (largely governed by productivity in manufacturing industries) have risen demonstrably faster than standards of living in underdeveloped countries (generally governed by productivity in agriculture and primary production) over the last sixty or seventy years. However important foreign trade may be to underdeveloped countries, if deteriorated terms of trade (from the point of view of the underdeveloped countries) reflected relative trends of productivity, this could most assuredly not have failed to show in relative levels of internal real incomes as well.

Dismissing, then, changes in productivity as a governing factor in changing terms of trade, the following explanation presents itself: the fruits of technical progress may be distributed either to producers (in the form of rising incomes) or to consumers (in the form of lower prices). In the case of manufactured commodities produced in more developed countries, the former method, i.e., distribution to producers through higher incomes, was much more important relatively to the second method, while the second method prevailed more in the case of food and raw material production in the underdeveloped countries. Generalizing, we may say that technical progress in manufacturing industries showed in a rise in incomes while technical progress in the production of food and raw materials in underdeveloped countries showed in a fall in prices. Now, in the general case, there is no reason why one or the other method should be generally preferable. There may, indeed, be different employment, monetary, or distributive effects of the two methods; but this is not a matter which concerns us in the present argument where we are not concerned with internal income distribution. In a closed economy the general body of producers and the general body of consumers can be considered as identical, and the two methods of distributing the fruits of technical progress appear merely as two formally different ways of increasing real incomes.

When we consider foreign trade, however, the position is fundamentally changed. The producers and the consumers can no longer be con-

1919-39; over the same period, agriculture increased only by 23 per cent, anthracite coal mining by 15 per cent, and bituminous coal mining by 35 per cent. In the various fields of mineral mining, however, progress was as fast as in manufacturing. According to data of the National Bureau of Economic Research, the rate of increase in output per worker was 1.8 per cent p.a. in manufacturing industries (1899-1939) but only 1.6 per cent in agriculture (1890-1940) and in mining, excluding petroleum (1902-39). In petroleum production, however, it was faster than in manufacturing.

sidered as the same body of people. The producers are at home; the consumers are abroad. Rising incomes of home producers to the extent that they are in excess of increased productivity are an absolute burden on the foreign consumer. Even if the rise in the income of home producers is offset by increases in productivity so that prices remain constant or even fall by less than the gain in productivity, this is still a relative burden on foreign consumers, in the sense that they lose part or all of the potential fruits of technical progress in the form of lower prices. On the other hand, where the fruits of technical progress are passed on by reduced prices, the foreign consumer benefits alongside with the home consumer. Nor can it be said, in view of the notorious inelasticity of demand for primary commodities, that the fall in their relative prices has been compensated by its total revenue effects.

Other factors have also contributed to the falling long-term trend of prices of primary products in terms of manufactures, apart from the absence of pressure of producers for higher incomes. Technical progress, while it operates unequivocally in favor of manufactures—since the rise in real incomes generates a more than proportionate increase in the demand for manufactures—has not the same effect on the demand for food and raw materials. In the case of food, demand is not very sensitive to rises in real income, and in the case of raw materials, technical progress in manufacturing actually largely consists of a reduction in the amount of raw materials used per unit of output, which may compensate or even overcompensate the increase in the volume of manufacturing output. This lack of an automatic multiplication in demand, coupled with the low price elasticity of demand for both raw materials and food, results in large price falls, not only cyclical but also structural.

Thus it may be said that foreign investment of the traditional type which sought its repayment in the direct stimulation of exports of primary commodities either to the investing country directly or indirectly through multilateral relations, had not only its beneficial cumulative effects in the investing country, but the people of the latter, in their capacity as consumers, also enjoyed the fruits of technical progress in the manufacture of primary commodities thus stimulated, and at the same time in their capacity as producers also enjoyed the fruits of technical progress in the production of manufactured commodities. The industrialized countries have had the best of both worlds, both as consumers of primary commodities and as producers of manufactured articles, whereas the underdeveloped countries had the worst of both worlds, as consumers of manufactures and as producers of raw materials. This perhaps is the legitimate germ of truth in the charge that

foreign investment of the traditional type formed part of a system of "economic imperialism" and of "exploitation."

Even if we disregard the theory of deliberately sinister machinations, there may be legitimate grounds in the arguments set out above on which it could be maintained that the benefits of foreign trade and investment have not been equally shared between the two groups of countries. The capital-exporting countries have received their repayment many times over in the following five forms: (a) possibility of building up exports of manufactures and thus transferring their population from low-productivity occupations to high-productivity occupations; (b) enjoyment of the internal economies of expanded manufacturing industries; (c) enjoyment of the general dynamic impulse radiating from industries in a progressive society; (d) enjoyment of the fruits of technical progress in primary production as main consumers of primary commodities; (e) enjoyment of a contribution from foreign consumers of manufactured articles, representing as it were their contribution to the rising incomes of the producers of manufactured articles.

By contrast, what the underdeveloped countries have to show cannot compare with this formidable list of benefits derived by the industrialized countries from the traditional trading-cum-investment system. Perhaps the widespread though inarticulate feeling in the underdeveloped countries that the dice have been loaded against them was not so devoid of foundation after all as the pure theory of exchange might have led one to believe.

It is, of course, true that there are transfer difficulties on the part of the underdeveloped countries which are avoided by production for export directly to the investing countries, but the above analysis may perhaps make a contribution to understanding why this traditional investment system broke down so rapidly and so irreparably in 1929 and 1930. The industrialized countries had already received real repayment from their foreign investments in the five forms described above, and in these ways they may have collected a pretty good return on their investments. When on top of the returns received in those five forms they also tried to "get their money back," they may perhaps have been asking (in the economic, though not in the legal, sense) for double payment; they may have been trying to get a quart out of a pint bottle.

There is a fairly widespread impression that this traditional trend towards deteriorating price relations for primary producers has been sharply reversed since prewar days, although this impression is not as strong now as it was in the middle of 1948. Even if we take that point of time, which represents the peak of postwar primary commodity prices up till now, a detailed analysis does not bear out the impression

that terms of trade have significantly improved in favor of the underdeveloped countries since prewar days.⁶

It may be suggested that the impression that price relations have sharply improved for primary producers can be attributed partly to the abnormal composition of primary commodity imports into the U.S. where coffee plays a predominating part (coffee prices have increased particularly heavily in the immediate postwar period), and also specially to the widespread idea that foreign trade between underdeveloped countries and industrialized countries is an exchange of the primary commodities of the former for the capital goods of the latter. In fact, among the imports of the underdeveloped countries capital goods do not generally form the largest category, mainly because the import of capital goods from abroad requires a great deal of complementary domestic investment in those countries for which the domestic finance does not exist or is not mobilized.

The major proportion of the imports of the underdeveloped countries is in fact made up of manufactured food (especially in overpopulated underdeveloped countries), textile manufactures, and manufactured consumer goods. The prices of the type of food imported by the underdeveloped countries, and particularly the prices of textile manufactures, have risen so heavily in the immediate postwar period that any advantage which the underdeveloped countries might have enjoyed in the postwar period from favorable prices realized on primary commodities and low prices of capital goods has been wiped out.

A further factor which has contributed to the impression that relative price trends have turned sharply in favor of primary producers since the war is the deterioration in British terms of trade and the publicity which this deterioration has received because of the strategic importance of the British balance of payments in the network of world trade. It should, however, not be forgotten that the changes in British postwar terms of trade do not merely represent *ceteris paribus* price changes but reflect considerable quantum changes; namely, an increase in the quantity exported and a decrease in the quantity imported. It may be suggested, perhaps, that these quantum changes rather than underlying price changes account for the adverse trend before devaluation of British terms of trade. Unless it is to be assumed that the elasticity of demand for British exports is infinite, it is obvious that an expansion in the volume of total exports of manufactured goods by almost 100 per cent will be reflected in lower unit prices for British exports; conversely, the reduction in the quantity of British imports is also reflected in higher prices paid than would otherwise have been the case,

⁶For details see the above mentioned study of "Relative Prices of Exports and Imports of Under-developed Countries" (Economic Affairs Department of the United Nations).

partly as a reflection of the diminishing bargaining strength of Britain in consequence of lower imports and partly as a necessary political concession to primary producers to enable them to maintain their incomes in the face of lower quantities sold. The supposition that the changed quantity relations in British trade (as well as deliberate colonial development policies) are largely responsible for the adverse trend in British terms of trade rather than price changes in world markets is greatly strengthened by the fact that other Western European exporters of manufactured goods did not only fail to experience any deterioration in their terms of trade, but on the contrary showed improved terms of trade.⁷ The effect of quantum changes on British terms of trade is of course difficult to disentangle statistically. It is more in the nature of a gain missed through inability of exploiting the postwar sellers' market price-wise to the full. It is surely a remarkable fact that in a world hungry for capital goods, and with her two most important direct industrial competitors eliminated, England should have experienced adverse terms of trade in the years 1945 to 1948.

At this point it might be worth noting the curious ambivalence which price relations in foreign trade play for the underdeveloped countries. Good prices for their primary commodities, specially if coupled with a rise in quantities sold, as they are in a boom, give to the underdeveloped countries the necessary means for importing capital goods and financing their own industrial development; yet at the same time they take away the incentive to do so, and investment, both foreign and domestic, is directed into an expansion of primary commodity production, thus leaving no room for the domestic investment which is the required complement of any import of capital goods. Conversely, when the prices and sales of primary commodities fall off, the desire for industrialization is suddenly sharpened. Yet, at the same time, the means for carrying it out are sharply reduced. Here again it seems that the underdeveloped countries are in danger of falling between two stools: failing to industrialize in a boom because things are as good as they are, and failing to industrialize in a slump because things are as bad as they are.⁸ It is no doubt true that failure to utilize high boom exports proceeds more determinedly for capital formation because of purely temporary price relations shows a deplorable lack of foresight, but this is hardly very apposite criticism of those underdeveloped countries which rely mainly on private development. All private activity tends to be governed by the price relations of the day.

⁷ *Economic Survey of Europe in 1948* (United Nations, Department of Economic Affairs), pp. 93-106, especially 97, 98 and 99.

⁸ This ambivalence of changing terms of trade has also been stressed in a different context by Professor Lloyd Metzler in his important article on "Tariffs, Terms of Trade and Distribution of National Income," in the *Journal of Political Economy*, February, 1949.

If our view is accepted (namely, that the traditional type of foreign investment as it was known prior to 1929 was "foreign" only in the geographical sense and not in the relevant economic sense) does it then follow that foreign investment has failed to fulfill one of the functions traditionally ascribed to it (and hoped for from it for the future); i.e., to spread industrialization more widely and more evenly throughout the world? It would be premature to jump to this conclusion. What has been maintained in the preceding part of this argument is that past foreign investment, and the type of foreign trade which went with it, failed to spread industrialization to the countries in which the investment took place. It may be, however, that for a full understanding of the process we have to consider not merely the investing and the invested countries but a third group of countries as well.

It is an interesting speculation that European investment overseas was the instrument by which industrialization was brought to North America. Roughly speaking, the supplies of food and raw materials pouring into Europe as the result of the investment-*cum*-trade system and the favorable terms of trade engendered by this system enabled Europe to feed, clothe, educate, train, and equip large numbers of emigrants sent overseas, principally to the United States and Canada. Thus the benefits to the investing countries of Europe arising out of the system described above were in turn passed on to the United States—the converse of the Marshall Plan—and were the main foundation of the enormous capital formation the result of which is now to be observed in North America. This "macroeconomic" analysis is, of course, in no way contradicted by the fact that the individual migrant was motivated by the prospect of raising his standards of living by the transfer.

Attention may be drawn to the interesting statistical computation of Corrado Gini that even the enormous capital stock characteristic of the United States economy is not more than the equivalent of the burden in consumption goods and in such services as health, education, and other provision for the immigrants—a burden which the United States was enabled to save by shifting it to the European mother countries of the immigrants. Perhaps in the final result it may be said that the ultimate benefits of the traditional investment-*cum*-trade system were not with the investing countries of Europe but with the new industrial countries of North America.⁹

If this analysis is correct, the industrialization of North America was made possible by the combination of migration and the opening up of

⁹In more recent years, specially since 1924, U.S. capital accumulation had of course become quite independent from the original stimulus supplied by immigration, and proceeded without any visible check in spite of a heavy reduction in immigration. The argument put forward here is meant as a historical explanation rather than an analysis of the present sources of capital investment.

underdeveloped overseas countries through European investment and trade. To that extent, Point Four and technical assistance on the part of the United States would be a gesture of historical justice and return of benefits received in the past.

It may be useful, rather than end on a wild historical speculation, to summarize the type of economic measures and economic policies which would result from the analysis presented in this paper. The first conclusion would be that in the interest of the underdeveloped countries, of world national income, and perhaps ultimately of the industrialized countries themselves, the purposes of foreign investment and foreign trade ought perhaps to be redefined as producing gradual changes in the structure of comparative advantages and of the comparative endowment of the different countries rather than to develop a world trading system based on existing comparative advantages and existing distribution of endowments. This perhaps is the real significance of the present movement towards giving technical assistance to underdeveloped countries not necessarily linked with actual trade or investment. The emphasis on technical assistance may be interpreted as a recognition that the present structure of comparative advantages and endowments is not such that it should be considered as a permanent basis for a future international division of labor.

Insofar as the underdeveloped countries continue to be the source of food and primary materials and insofar as trade, investment, and technical assistance are working in that direction by expanding primary production, the main requirement of underdeveloped countries would seem to be to provide for some method of income absorption to ensure that the results of technical progress are retained in the underdeveloped countries in a manner analogous to what occurs in the industrialized countries. Perhaps the most important measure required in this field is the reinvestment of profits in the underdeveloped countries themselves, or else the absorption of profits by fiscal measures and their utilization for the finance of economic development, and the absorption of rising productivity in primary production in rising real wages and other real incomes, provided that the increment is utilized for an increase in domestic savings and the growth of markets of a kind suitable for the development of domestic industries. Perhaps this last argument, namely, the necessity of some form of domestic absorption of the fruits of technical progress in primary production, provides the rationale for the concern which the underdeveloped countries show for the introduction of progressive social legislation. Higher standards of wages and social welfare, however, are not a highly commendable cure for bad terms of trade, except where the increment leads to domestic savings and investment. Where higher wages and social services are

prematurely introduced and indiscriminately applied to export and domestic industries, they may in the end turn out a retarding factor in economic development and undermine the international bargaining strength of the primary producers. Absorption of the fruits of technical progress in primary production is not enough; what is wanted is absorption for reinvestment.

Finally, the argument put forward in this paper would point the lesson that a flow of international investment into the underdeveloped countries will contribute to their economic development only if it is absorbed into their economic system; i.e., if a good deal of complementary domestic investment is generated and the requisite domestic resources are found.

TREATY, GUARANTY, AND TAX INDUCEMENTS FOR FOREIGN INVESTMENTS

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For several years United States Government officials and private businessmen have been pointing out to the representatives of underdeveloped countries that the greatest potential reservoir of foreign investment is in the American capital market. This capital, they have said, will not go abroad voluntarily if it finds better returns at less risk at home, and the United States Government cannot compel its citizens to invest abroad. From this they have drawn an obvious moral. The sooner the underdeveloped countries create a "climate" favorable to private American investments, the better it will be for their programs of economic development.

The first question before us is whether and to what extent this "climate" can be improved by more satisfactory treaty arrangements. In February, 1948, we signed a modern treaty of Friendship, Commerce, and Navigation with Italy and on the 23rd of November we signed with Uruguay the first of what is hoped to be a series of Treaties of Friendship, Commerce, and Economic Development. The negotiation of such treaties is a time-consuming process and it is often suggested that their investment provisions should be segregated and incorporated in separate investment treaties while we are negotiating FCN treaties at our leisure. I think this would be unwise. Our negotiators have found that once the investment provisions have been agreed to the other parts of FCN treaties can be quickly completed. Investment treaties, moreover, should not be thought of as in any way substitutes for FCN treaties, since there is hardly a provision in a modern FCN treaty that is not of direct or indirect importance to investors. I should like, if time permitted, to demonstrate this point by a detailed review of the Uruguayan treaty. Since, however, this paper is concerned with inducements to an outflow of American capital, I shall deal only with the treatment which, under this treaty, Uruguay accords on a reciprocal basis to American enterprise.

In the first place our nationals and companies have the right to engage in commercial, manufacturing, processing, and construction as well as various cultural activities in Uruguay on the same basis as Uruguayan nationals. They may organize local companies to engage in these activities and in mining, and once these local companies are lawfully established, their activities are accorded national treatment. Most-favored-nation treatment is not, as in the Italian treaty, accorded in

these matters, but that is not really important since Uruguay does not intend, and is most unlikely to accord, better than national treatment to the companies of any third country. Most-favored-nation treatment is, however, accorded to American companies in exploring for and exploiting mineral deposits and in organizing, participating in, and operating Uruguayan companies in other fields in which national treatment cannot be granted. American companies are accorded national treatment with respect to acquiring, owning, and using real property. They receive national treatment with respect to access to courts of justice and an absolute right to employ specialized personnel regardless of nationality. Americans resident in Uruguay and American companies engaged in business in Uruguay may not be subject to taxation more burdensome than that imposed on Uruguayan nationals and the business and capital taxed by Uruguay must be reasonably allocable to Uruguayan territory. The right to accord better than national tax treatment to foreign companies on a basis of reciprocity is reserved.

The treaty also contains some general undertakings not found in the Italian treaty. Their inclusion is the main reason for calling it a development treaty. The fourth Article reads as follows:

Each High Contracting Party shall at all times accord equitable treatment to the capital of nationals and companies of the other Party. Neither Party shall take unreasonable or discriminatory measures that would impair the legally acquired rights or interests of such nationals or companies in the enterprises which they have established or in the capital, skills, arts or technology which they have supplied. Neither Party shall without appropriate reason deny opportunities and facilities for the investment of capital by nationals of the other Party; nor shall either Party unreasonably impede nationals and companies of the other Party from obtaining on equitable terms the capital, skills, modern technology and equipment it needs for its economic development.

These undertakings, except the last, are spelled out in the provisions of the treaty which govern the right of entry of our capital into Uruguay and the treatment to be accorded to it, including provisions on expropriation and convertibility.

As to right of entry, the Uruguayan treaty is very favorable to our capital. It states that "the nationals and companies of either party shall be permitted freely to introduce capital funds into the territories of the other party." The provisions I have described according national treatment to our companies give them unimpeded rights of entry in specified fields, subject only to the limitation that they cannot engage in activities from which Uruguayan nationals are excluded. The fact that they do not have such a free right of entry in other fields, such as exploration and water or aerial transport, is due as much to the inability of the United States to grant reciprocal rights as to Uruguayan unwillingness to include such fields.

The Italian treaty gives American capital similar rights of entry, but it is very doubtful whether we shall be able to incorporate the open-

door principle to the same extent in future FCN or development treaties with a good many other countries. Many governments are extremely reluctant to give any treaty commitments that would limit their rights to "screen" the entry of foreign capital in all fields, and they advance many arguments to support their position. One is that unrestricted free entry of our capital in major fields would be an inflationary force, since our enterprises would compete for scarce labor and materials and so drive up prices. One may reply to this, of course, that the new capital will be productive and that the control of inflation should be achieved by general monetary and fiscal measures and not by restrictions on the inflow of productive capital, especially discriminatory ones. Many governments, however, also feel that incoming investment must be screened to make sure that scarce labor and resources are not diverted from employment in types of production essential to the success of general economic development plans. Some governments consider screening essential to safeguard their balance of payments, because of the future drain on foreign exchange that would result from servicing the new capital. This view would not be accepted by most economists, though there are grounds for being apprehensive as to how soon or how certainly a large outflow of American capital would, under modern conditions, actually contribute to the receiving country's ability to provide additional foreign exchange.

There is one additional, and I think more basic, reason why capital receiving countries do not want to limit in FCN treaties their rights to screen incoming capital. It is a general fear that our capital and management will be so efficient that Americans will come to control one industry after another and their countries will become American economic colonies. This fear is reinforced in many cases by strong protectionist sentiment on the part of local enterprises with which our capital would be competitive. This leads sometimes to a policy of making the right of entry of foreign companies subject to various restrictions and limitations that would minimize their competition with local interests.

It would be easy to give examples of the strength of this resistance to relatively free entry of foreign capital.

Traditionally, new countries have not been developed by the migration of foreign capital in accordance with two- or three- or five-year plans of economic development. Although we have become great advocates of economic planning when it comes to attaching conditions to American assistance, our American attitude is still, on the whole, that what is needed is to release private initiative and not to restrict foreign investment to these activities that fit into some pigeonhole of a speculative long-run governmental plan. There is a great deal to be said for this point of view but the question of deciding where this freedom

shall begin or end is certainly very difficult. The United States is assuming the vast responsibilities of the sole major capital exporter in a new frame of reference. It is our national policy, as stated in President Truman's inaugural address, that in future our private foreign investment shall serve the interests of the countries in which it is made as well as the interests of the investors. There is really no disagreement on this. The question is, shall we say in our treaties that in the following fields the underdeveloped countries will give free access to our private investments and in other fields the decision as to whether such investments shall be allowed will rest with their governments. This is what we have done, in effect, in the Italian and Uruguayan treaties. I think we should continue in fair and free negotiations to try to convince underdeveloped countries that it is to their interest to maximize the number of fields in which they should agree freely to accept our investments. If, however, for reasons that I have mentioned we do not convince them, I do not think we should refuse to conclude treaties. Our position should be that we recognize the right of underdeveloped countries to screen the entry of our capital, but that we will not agree to having conditions attached to the right of entry that will in effect subject it to discriminatory treatment. We should insist on national and nondiscriminatory treatment once it is admitted. We should also insist on mutually satisfactory provisions on control and management, expropriation and withdrawal of capital, and capital service.

Almost all underdeveloped countries desire to see their own nationals at the helm in the management and control of their industrial and major productive enterprises. In spite of this, the Uruguayan treaty specifically gives our companies the right to control and manage local companies lawfully established by them. In this respect it is broader than the Italian treaty, since this right extends to companies not only in the fields in which there is free right of entry but in other fields as well. We may not be able to persuade some other underdeveloped countries to go as far as Uruguay on this point. Neither the Italian nor the Uruguayan treaty excludes possible action by either government requiring the sale of stock to its own nationals or the employment of its own nationals in official and executive positions, if such requirements do not destroy *de facto* control. As far as the stimulation of the flow of capital is concerned, retention of *de facto* control is the nub of the problem.

On expropriation, the Uruguayan treaty provides that the taking of property legally acquired by our companies shall be subject to procedures no less favorable than those applicable in the case of Uruguayan nationals, and that payment of just compensation in a prompt, adequate, and effective manner shall be ensured. The rules that apply to

the conversion of this compensation into dollars are the same as those that apply to capital withdrawals in general, and this is regarded by many American businessmen as a defect in the treaty.

Under the treaty our companies may freely withdraw from Uruguay earnings, whether in the form of salaries, interest, dividends, commissions, royalties, or otherwise: funds for the amortization of loans; funds received as compensation for expropriated property; and funds for capital transfers. However, Uruguay retains the right in periods of exchange stringency to apply exchange restrictions to assure the availability of foreign exchange essential for the health and welfare of its people. In that event Uruguay must, within three months, make reasonable and specific provision for capital withdrawals, giving consideration to the special needs for other transactions, and must at any time consult with us on this matter.

These provisions seem to me to provide as much priority to capital withdrawals as can reasonably be asked for, but I wish to point out several respects in which they are still unsatisfactory to some American businessmen. The National Foreign Trade Council would like to have "capital service" given an exchange priority second only to "essential imports" rigidly defined to mean literally food, fuel, shelter, and cure and prevention of disease. This is not the same thing as imports essential for the health and welfare of the Uruguayan people. The National Foreign Trade Council would also define capital service to include engineering and managerial service fees. Many businessmen, I feel sure, will be dissatisfied with the three months' delay in providing for capital withdrawals in time of exchange stringency, and the further delays that may result from consultation.

Speaking generally I am convinced that there are four limitations inherent in the use of FCN or development treaties to promote American foreign investment. First, they must be negotiated on a basis of reciprocity. If we should use our economic power to force the acceptance of treaty provisions that are not fully reciprocal, we would be guilty of a form of economic imperialism, and treaties so negotiated would not really induce, in any lasting sense, a climate favorable to foreign investment. Second, the underdeveloped countries cannot reasonably be expected, in basic treaties of establishment, to give an absolute priority in the allocation of available exchange to investors as compared to all other claimants. Even if we were to demand only a second priority after essential imports as defined by the National Foreign Trade Council we would be on very treacherous ground. Such priorities would, indeed, reduce the risks of investors, but they would also increase the risks of traders and would open up wide areas of dispute on the definition of essential imports. Thirdly, modern FCN trea-

ties cannot be expected to revive the open door of the nineteenth century, and, finally, they cannot be expected, it seems to me, to contain any provision that would deny the maximum opportunity to nationals of underdeveloped countries to receive training from, to acquire ownership in, and to participate in the management of foreign enterprises operating in their territories. Treaties stipulating that there must be a majority ownership of such enterprises in the hands of nationals of the underdeveloped countries would be a real bar to American investments and I do not think we should accept them. As I have indicated, however, American business receives the substance of what it wants under the Italian and Uruguayan treaties and should be content not to press for more.

If we attempt to disregard these four limitations we shall not negotiate many satisfactory treaties, and we should always remember that only treaties freely negotiated and not treaties unwillingly accepted under pressure will promote a climate favorable to private investment.

The question of whether pressure should be used has been raised sharply by the introduction of HR 6026 (the Herter bill) into the House on August 17, 1949. This bill provides that before an underdeveloped country shall be eligible to receive technical assistance from the United States under Point Four, it shall meet a series of stringent requirements including adherence to FCN treaties, tax conventions, and convertibility treaties satisfactory to us. It provides also that after two years it shall not be the policy of the Export-Import Bank to make loans to countries that have not met these conditions except by special authority of the President. Its underlying philosophy is that the Point Four program is essentially a program for developing underdeveloped countries by the use of private capital and know-how. Consequently, it would be wrong for our government to give technical or financial assistance to any such country if it does not demonstrate by some form of "suitable performance" that it is willing to accord reasonable and equitable treatment to private foreign capital. The bill is designed to disabuse underdeveloped countries of the idea that if they do not do this, sooner or later our government itself will provide the needed assistance.

I am not here to discuss the Point Four program generally or to debate the Herter bill. I should like to point out, however, that the Herter bill does not give any assurance to underdeveloped countries that if they meet all the conditions any private capital will be forthcoming. All they can be sure of is some unspecified part of what is left over from Congressional technical aid appropriations after our contributions to United Nations programs have been made. The Herter bill seems to imply, moreover, that if we cannot promote the economic development of other countries by the export of private capital we lose

interest in it altogether. If this is not the implication, then it is not a very big stick to hold over the heads of the underdeveloped countries. I do not believe that we can get FCN or development treaties that will really improve the climate for private investment by using such a little carrot and such a medium-sized stick. Such treaties are invaluable if they reflect an already formed intention on the part of underdeveloped countries to welcome the aid of American private capital in their development. They are the second and not the first step in the creation of a favorable climate.

I shall now turn briefly to the vexed question of guaranties. Last July the Administration introduced legislation authorizing the Export-Import Bank "to guarantee United States private capital investment in productive enterprises abroad which contribute to economic development in foreign countries against risks peculiar to such investment." After hearings an amended bill was reported by the House Committee on Banking and Currency which deleted the words "against risks peculiar to such investment" and substituted "by assuring either or both (i) the conversion into United States dollars of foreign currency derived from an investment, and (ii) compensation in United States dollars for loss resulting from expropriation, confiscation, or seizure by action of public authority." The total lending power of the Export-Import Bank, 3,500 million dollars, puts a ceiling on the maximum possible amount of such guarantees, but the effective ceiling is less than 1 billion because at present the uncommitted lending power of the Bank is about 970 million. Even this amount would probably not be available for guaranties since, as Mr. Norman Lyttel has frequently pointed out, every such guaranty would cut down the power of the Bank to make new loans. It is a defect in the bill that guaranties and new loans would represent competing claims on the Bank's resources. There should be, I believe, a separate guaranty fund, but on the whole I think the cautious and experimental approach of the proposed legislation should be applauded. I think it is wise in limiting the risks to be guaranteed to the two that are the most serious obstacles to the outflow of our capital.

Any guaranty program plunges us into a series of difficulties which we would be well advised to avoid unless the compensating advantages are very great. Quite aside from the primary problem of deciding what risks should be guaranteed a long list of such difficulties can be made out. Many businessmen fear that under any system of guaranties the United States government would become to some extent a partner in the guaranteed enterprise with rights of access to its books and some rights of control. Many businessmen also fear that if guaranties are given for new investments, only companies carrying on established

activities abroad will be confronted with a new group of competitors in a favored position, but no one has suggested that capital already committed or capital that would flow abroad in any case needs to be stimulated by guaranties. There are also inherent difficulties in defining investment. For example, pressure has been brought to define it as any transaction requiring payment after six months. To accept this definition would convert an investment guaranty program into an export guaranty program, but somewhere a line will have to be drawn between what is and what is not an investment. Even more troublesome is the problem, under any guaranty system, of sorting out the sheep from the goats. We do not wish to stimulate investment of every type by the use of the taxpayers' money, but only investment which will definitely promote economic development and contribute to the capacity of the receiving country to service its obligations and meet its other requirements in foreign exchange in the future.

Moreover, any guaranty program involves international difficulties. If an American enterprise takes advantage of a convertibility guaranty, the United States Government comes into control of inconvertible foreign currency or foreign assets. How shall it dispose of them? The Administration witnesses at the House hearings have indicated that before granting guaranties the Export-Import Bank would enter into executive agreements with the underdeveloped countries on all phases of this matter. Such agreements would probably provide for later conversion of the local currency into dollars, perhaps over a period of years. This means that the granting of guaranties would become to a large extent an international matter. I feel sure, moreover, that no such guaranties would be given unless the country in which the investment was to be made were willing to give some measures of "suitable performance" with respect to the equitable treatment of private American investment.

The list of the inherent difficulties of any guaranty program is not yet complete. There is the question of the rate of exchange at which convertibility guaranties should be made good. There is also the question of the charge to be levied. If this charge is to be uniform it will not bear a proper relation to the risks assumed. If it is to be high enough to build up a fund which will take care of all losses it will be too high probably to encourage investment. If it is not high enough there will be a direct call on the taxpayers' purse.

Nothing is to be gained by not facing these difficulties if guaranties will really stimulate private investment on an adequate scale. The two great risks of inconvertibility of the proceeds of investment and of the expropriation of property without prompt adequate and effective compensation are, for the time being, so important that some form of

guaranty to cover them may be in the public interest. It is my belief, however, that convertibility guaranties should be limited to 100 per cent of the capital invested, and that there should be no dramatic or long-term commitment on the part of this government to continue a guaranty program indefinitely.

I have not dealt with the question of tax inducements to stimulate foreign investment because it seems to me that the proposals of the Administration on this score are reasonable and proper. They aim at corrections in our system of taxation which will eliminate discriminations against income earned abroad or property held abroad. The alternative for this is to encourage foreign investment by putting it into a definitely favored position from a tax viewpoint. Many suggestions for doing this have been advanced but it does not seem to me equitable to use the taxing power to divert the resources of Americans from employment at home to employment in other countries.

What I have said will suggest an attitude of reserve towards the employment of inducements or other artificial aids to foreign investment that are of direct financial benefit to the investor. This does not mean, to me at least, that the government should not act vigorously to stimulate foreign investment. I believe that it is doing so. Should the recent realignment of currencies and the steps taken in conjunction with it lead to a general relaxation of currency restrictions, the question of guaranties of convertibility would become a very minor one. Should the program of technical assistance under Point Four open the way for investment opportunities on a large scale, the problem of reconciling our views about free access and the views of underdeveloped countries about screening may also diminish in importance. Should the attitude of suspicion of underdeveloped countries towards foreign private capital be modified, as I believe in some cases it is being modified, the problems of expropriation and management and control would be reduced. We have already seen in recent months actions by France, Venezuela, and India of a unilateral kind that are evidence of a more favorable climate for private foreign investment. It is along such lines that I think the problem will be solved in conjunction with some government lending and an increased volume of activity by international lending institutions. In the meanwhile, we should, I think, press forward with our program of modernizing our system of FCN treaties along the lines I have discussed, and supplement this by a minimum and temporary system of guaranties and a program of equalizing the burden of taxes on American resources employed at home and abroad.

THE DOMESTIC EFFECTS OF CAPITAL EXPORT UNDER THE POINT FOUR PROGRAM

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The kind of foreign investment contemplated in this paper is investment intended to develop the resources of the underdeveloped areas of the world, taking place more or less steadily and over a long period. The domestic economic aspects of such investment that I shall discuss are its effect upon our employment and production; its relation to the European balance-of-payments problem and the termination of the European Recovery Program; its relation to international trade barriers and our commercial policies; and, finally, the long-run problem of interest and amortization on a growing volume of foreign investment. The effects upon us of the higher state of economic development which other countries will presumably attain in the future have to be neglected for lack of time.

The effects of capital exports under the program are examined in two separate phases: first, the period in which new investment exceeds the return flow of income and principal from new investment and, second, the period in which the reverse is true and the net flow of these funds is inward. Future annual gross investment might not exceed net income and amortization on all foreign investment, past and future, for very long, since our net income alone was already one billion dollars in 1948. But past investment is a fact irrespective of the Point Four program. The only additional problem is that of servicing future investment. Since the capital export phase of the development process requires decades, not years, future new investment may be expected to exceed this income and amortization for a considerable period.

Investment of American capital will enable the developing countries to finance additional purchases of capital goods and other goods from the United States and also from other countries. The dollar value of United States exports of goods and services will therefore be higher than it would have been without such an outflow of funds. The money incomes of Americans producing for export will be higher. In general, there is no economic reason to expect that the export of capital will automatically cause the money value of domestic investment or consumption to be significantly lower than it otherwise would have been. Foreign investment will, therefore, have an expansive effect upon the economy, exerting its primary effect by raising prices when maximum employment prevails and by raising employment and production when they are below maximum levels.

There is ample reason to believe that the economy of the United States might have to make a conscious choice of policies to maintain full use of its resources in the future. The Council of Economic Advisers pointed out a year ago that the proportion of resources devoted to domestic investment as a whole in 1948 was probably somewhat higher than could be continuously maintained.¹ Private domestic fixed capital expenditures, at 15 per cent of the gross national production in 1948, reflected in part the need to make up for wartime and some prewar deficiencies. The shift to more sustainable long-run patterns would probably require a relative decline to about 11 or 12 per cent, the Council said. Now, the rate of inventory accumulation has already diminished. In addition, the government's foreign aid programs are scheduled to end. In the face of these prospects, an expanded volume of foreign investment is one way of sustaining production, employment, and income. But it must be looked upon as merely one of several means toward that goal. The proper basis for appraising foreign investment, therefore, is not to compare it with inaction and failure to use our resources but to compare it with alternative types of expansion and resource use.

While we can—in a blueprint—attain and maintain high production and employment with or without foreign investment, the difficulty or ease of doing it in practice will obviously depend on the dimensions of the problem. Its dimensions are roughly indicated by the following projections, based on a 3 per cent growth in our gross national product at full employment. Suppose that present extraordinary foreign aid ceases and that private domestic fixed capital expenditures decline to the level of about 12 per cent of the gross national product which the Council mentioned as sustainable over a period of time. Suppose, also, that the federal government's domestic expenditures remain about as they are and that state and local governments do not expand their purchases of goods and services. Under these assumptions and with no foreign investment, the maintenance of full employment would require an expansion of personal consumption expenditure by about 50 per cent in ten years. This would represent about 77 per cent of gross national product, only a slightly higher proportion than was reached in the best prewar years but much higher than the 68 per cent prevailing in the postwar period. Considering the possibilities of expanding the private domestic investment and consumption areas not on a one-year basis that makes up past deficiencies or borrows from the future but from year to year in a manner consistent with stability,

¹ Part III of "The Annual Economic Review, January 1949," published with *The Economic Report of the President to the Congress, January 7, 1949.*

it seems clear that we cannot afford to neglect the area of foreign investment.

Magnitude of Aggregate Stimulating Effects. Under present and foreseeable future conditions, available U.S. dollars are likely to be spent here. Borrowing countries or the countries supplying them are likely to expand their incomes and imports enough to use up the additional dollar capital. Our net foreign investment will therefore fail to reflect the gross outflow of capital only to the extent that other countries make deliberate efforts to replenish their reserves.

The effects of net foreign investment on domestic employment are, in general, as great per dollar as those of domestic expenditures. It has been contended that they are smaller because foreign investment can affect employment only through its effect on exports.² I see no reason for this conclusion. The range of exportable goods is enormous. It includes consumers' goods not likely to feel the primary effects of domestic investment. The volume of capital likely to flow abroad even on the most optimistic assumptions is only a fraction of the value of the additional goods that could be exported but would not be if we do not invest abroad. For that reason the fact that foreign investment affects only exportable products is not of itself likely to be an effective limiting factor in its employment effects, except insofar as additional export demand may be more concentrated than alternative domestic expenditure would be upon agricultural products in inelastic supply.

As to the secondary effects upon American employment and production arising from the initial expansion of incomes and output, I see no reason for supposing that they are likely to be significantly different in magnitude from the secondary effects of increased domestic spending.

Areas of the Economy Affected. A full appraisal of the domestic effects of alternative methods of expansion would require comparing not only their aggregate effects but also their effects on the different sectors of the economy. Generalizations about the range of products affected by foreign investment as compared to other types of programs are not useful, however. For fruitful results, one would have to compare fairly specific domestic and foreign programs. A full examination of this problem would also require, on the foreign investment side, a careful projection of the direction of our capital export and of the direction and character of the resulting additional spending by foreign countries. I

² Norman Buchanan, in his book, *International Investment and Domestic Welfare*, concludes that the primary employment effects of foreign investment are less than domestic investment because of being restricted to exportable goods (p. 208). In the preceding paragraph he says: "All that we can be sure of is that in the last analysis the dollar balances must be exercised for the purchase of American goods or services for the benefit of foreigners" (p. 207). This indicates that his conclusion refers to net foreign investment rather than the gross outflow of capital.

am not prepared to make detailed projections at this time but I shall indicate what seem to me some probabilities.

The pattern of domestic effects depends in large part on what happens to the dollar position of Western Europe with and without foreign investment, on the assumption that the European Recovery Program ends in 1952 as scheduled. Since much else depends on this, too, it will be well to go into the question more fully.

Some of the factors in the continuing European "dollar shortage" are temporary, but it is now becoming increasingly recognized that many of them may not be. The European economy for several decades had a trade deficit with the United States but its total current international payments were in balance before the war. The dollars to pay for net purchases of goods from the United States were obtained by net earnings from services and investment income directly from the United States and by net receipts from other areas of the world arising from net sales of goods as well as of services and receipt of investment income. Since prewar days Western Europe has lost about 700 million dollars a year of income from investments in other areas and its abnormally favorable interwar terms of trade have deteriorated. There is also a greater determination to maintain high employment and a more equal distribution of income, which—for Britain at least—probably involves an increased propensity to import.³ It may be expected, therefore, that with a relaxation of import controls Western Europe would still have a very substantial deficit with the United States for years after the European Recovery Program is scheduled to end.

This consideration alone would not create special problems if Europe had a surplus with other areas, and if these other areas also had a surplus with the United States. In that event, Europe could convert its surplus with them into dollars, as it did before the war. But those two prewar conditions for the financing of Europe's deficit with the United States no longer exist.

Moreover, it will be difficult to restore them. If we maintain maximum employment and production some increase of our imports is to be expected. But taking into account the fact that 1948 was a year of abnormal accumulation of imported as well as domestic goods for inventory and also the lowered levels of import prices, this expansion

³ In the interwar period, favorable terms of trade and unemployment concealed a deterioration in the competitive position of Great Britain. T. C. Chang has estimated that if British unemployment in 1938 had been 5 per cent instead of 15 per cent of the labor force, the value of retained imports would have been at least 1,300 million pounds instead of the actual 859 million. (Cf. "The British Demand for Imports in the Interwar Period," *Economic Journal*, June, 1946, p. 206.) Even if half of this estimated 441 million pounds difference in imports had been offset by favorable indirect effects upon British exports, the moderate actual current account deficit of 70 million pounds would have been 290 million and would have been a problem of major proportion.

above 1948 levels is not likely, I should guess, to be more than 2 billion dollars by 1953. An increase of this magnitude would fall short of the probable decline in government foreign aid, under present programs, by at least 2, perhaps 3, billion dollars. A rise in our total imports by 2 billion dollars would not permit foreign areas outside Western Europe, which had a deficit of nearly 3 billion dollars with us in 1948, to convert this deficit into a significant surplus.

Even if these areas could earn some surplus with us, Europe's prewar claim to the surplus dollars thus earned, based in large part upon its investments in the rest of the world, has greatly shrunk. In the absence of substantial foreign investment by the United States, Europe could probably not earn enough dollars in those areas to finance a substantial deficit with us after the European Recovery Program ceases. In this predicament it would either have to maintain rigorous restrictions against imports of nonessential products from the United States or seek to displace United States exports in the markets of other countries. Both policies would no doubt be pursued, but the most concentrated effect upon particular commodities would probably be on those we have traditionally shipped and still ship to Europe. If net foreign investment and government aid were very low, our total exports of goods and services might well decline 3 or 4 billion dollars from the 1948 level, even if imports rise with expanding production and income. Our exports to Europe alone would probably in that event be cut quite drastically.

Among our exports to Europe, the decline would probably be concentrated upon commodities that European countries can get elsewhere or that they regard as least essential. I should expect that tobacco, cotton, and wheat would be among the important products likely to be most affected. Roughly one-quarter to one-third of our production of these crops is being exported and roughly one-fifth to one-quarter of this production is going to Western Europe.⁴ Since the domestic income elasticity of demand for these commodities is quite low, the maintenance of high domestic purchasing power alone would not significantly offset the effects on them of reduced exports. The resources producing these commodities, and any others similarly af-

⁴The prewar and postwar relations of our exports to our production of these crops is shown in the following figures:

	Total U.S. exports as percentage of production			U.S. exports to ERP countries as percentage of production		
	1935-39 average	1947-48	1948-49	1935-39 average	1947-48	1948-49
Raw cotton	42.5	17.1	33.1	26.4	7.6	21.1
Leaf tobacco	33.0	21.6	25.5	23.1	15.7	20.5
Wheat and wheat flour	6.6	35.0	38.8	4.3	25.3	25.5

fect, would have to undergo drastic readjustments if the European Recovery Program is not followed by substantial foreign investment. While a vigorous domestic economy would provide alternative opportunities which might make it possible to move resources into other kinds of production, a continuance of high support prices would make such a readjustment more difficult and might result in our continuing for a long time to produce goods for which there is no market.

Would Europe's demand for our products be any higher if we do have large foreign investment under the Point Four program? Taking into account the standards of living prevailing throughout the world and the purposes of the Point Four program, it may be assumed that relatively little of the capital exported under a development program would go to Western Europe. It is probable that most of the funds going to the underdeveloped countries would be spent by them on goods used directly in the development projects for which the money was raised. Prior to devaluation it was clear that most of these funds would have been spent in the United States. But in the future Europe, too, will have a large capacity to produce and, it is widely believed, to export capital goods. Now that devaluation has improved Europe's competitive position, the developing countries may wish to do a considerable portion of their buying there. If they do, the countries that supply them will then have the dollars to spend and may use them to purchase any sort of exportable United States products.

I conclude from these considerations that a substantial export of capital from the United States, by contributing to a constructive solution of the European dollar problem, would permit Europe to buy from us goods that it wants and we can efficiently provide, and that such capital export can obviate the necessity, on our part, for a painfully rapid readjustment of some of our resources.

Some Principles of Foreign Investment Policy. It is important to recognize, however, that while the export of capital from the United States to underdeveloped areas is a necessary condition for a satisfactory solution of the European dollar problem and for the maintenance of our exports to Europe, it is not a sufficient condition. These areas must also be both able and willing to spend this capital in the European countries. So far as their willingness is concerned, the recent currency devaluations are a big step in the direction of making Europe an attractive supplier of the capital goods these areas want. But their ability to spend in Europe depends on a considerable portion of our foreign investment resulting in a flow of free dollars.

This consideration points to the conclusion that our loans ought not to be tied. If the borrowers are required to spend the proceeds of loans in the United States, Europe cannot earn enough dollars to continue

buying American goods. By tying our loans we would not greatly affect the aggregate volume of our exports; we would merely influence its composition, discouraging exports of goods that Europe wants and encouraging exports to the underdeveloped countries. Considering the probable identity of our problem commodities, this influence on the pattern of our exports may be in the wrong direction. At the same time, such a policy would prevent foreign investment from having the maximum possible beneficial effect in restoring European viability.⁵

The same consideration points to the danger of overemphasizing direct equity investment under the Point Four program. The advantages of such investment in promoting development have been frequently pointed out. But it also has limitations. To the extent that it involves any movement of funds at all, the American investing company need not, but in practice usually does, ship equipment directly from the United States so that the flow of free dollars is minimized when capital export takes this form.

This consideration also points to the danger of the "needed currency" principle in public lending. Under this principle, capital is provided only in the currency of the country where the capital goods are to be purchased instead of in that of the country where capital is cheapest. Under this principle, the location of the supplier determines the currency lent, instead of being determined by it as in the case of tied loans, but the effect in impeding multilateral settlements is the same. If the net flow of capital to one group of countries is limited to our export surplus with them, obviously our export surplus to the rest of the world will be limited to the net flow of capital to it.

Finally, there is the question whether the present practice of limiting loans to the dollar cost of the development project is desirable. Most, if not all, development projects involve substantial expenditure inside the underdeveloped country as well as abroad. They tend, therefore, to raise its money incomes and its general demand for imports, so that the total demand for imports, including that involved in the project itself, increases by more than the available foreign exchange. We have the paradoxical result that the export of capital instead of decreasing the dollar shortage will increase it. This effect can of course be limited if the developing country will save more at a given income than it did before, but in most of these countries the scope for additional saving is limited. If these countries fail to save more and if they also have claims upon the reserves or the production of the European countries, as do some members of the sterling area, the limitation

⁵ It may be pointed out, incidentally, that it is also inconsistent with our general policy of promoting nondiscriminatory and multilateral trade, which envisages goods being purchased where they are cheapest.

of foreign capital to the foreign exchange requirements of the development process may actually increase the dollar difficulties of Europe, too, while the investment process is going on. In practice these countries must save more in relation to their incomes and we must also invest in them more than the dollar cost of their development projects.

These considerations must be taken into account if an expansion of foreign investment in the underdeveloped areas is to make it possible for us to end our direct aid to Western Europe by 1952 without upsetting their economies or adversely affecting ours.

Effects on Goods Available to United States. Foreign investment, because it is investment, does not result directly in the production of goods or services that become available to the American consumer and therefore does not directly raise his standard of living while it is going on. Additional goods become available to the American economy when the income on the investment is received. In this respect foreign investment is similar to domestic private or public investment. Even though the goods resulting from domestic investment are retained at home, their yield in consumable goods and services accrues only over a period of time.

This does not imply, of course, that foreign and domestic investment yield equal returns to the United States. Even if the vast external economies of investment in underdeveloped countries are left out of account as not accruing to this country, the potential marginal product of foreign investment is probably higher than that of domestic investment in general, though perhaps not so high as that of investment in our own underdeveloped regions.⁶ But even if the marginal private product of foreign investment is higher than that of domestic investment, some of it is retained in the developing country in taxes and other forms. In addition, the income may be less secure for political reasons. Despite these differences in returns and security, the essential similarity is worth remembering: both, if soundly conceived, may be expected to yield a product over a period of time and neither yields a substantial portion of its full product immediately.

Possible Indirect Effects on Domestic Employment and Living Standards. Up to this point, it has been assumed that an expanded program of foreign investment in underdeveloped countries would involve higher expenditures abroad and no smaller domestic military expenditures or emergency foreign aid than would otherwise be made. Only on this assumption would foreign investment reduce the domestic

⁶In this connection it should be noted that the marginal product of domestic private investment is not necessarily as high as the return on existing assets. There are many reasons why new investment may be undertaken that yields less than existing assets, even though the equity of stockholders is thereby reduced.

civilian expenditures necessary for full employment. This assumption fails to take into account what could easily be the most profound and far-reaching effects on our economy of investment that develops the resources of the underdeveloped countries: its effect upon our domestic and foreign expenditures arising from the cold war.

The export of capital to underdeveloped countries may be indispensable, though not sufficient, to reduce international political instability and tensions and consequently these cold war expenditures. The role that the export of American capital to underdeveloped areas can play in contributing to a solution of Western Europe's balance-of-payments problems has already been indicated. If failure on our part to invest abroad results in violent economic dislocations or intensified austerity in Europe, the deeprooted political and social cleavages which have already manifested themselves but now are less apparent may again emerge. Similar political factors are at work in the underdeveloped areas that are intended to be the direct beneficiaries of the Point Four program. The aspiration of new sovereign nations in Asia, increasingly exposed by modern communication and direct contact to Western standards of living, to develop their economic resources and improve their present desperate living standards is one of the most basic drives of the postwar world. If these aspirations are frustrated, the political orientation of these countries appears likely to develop unfavorably for us. If this occurs and the internal stability of European countries is also undermined by renewed economic difficulties, we might, however reluctantly, feel forced to resume foreign aid on a less constructive basis and to continue our own defense expenditures at higher levels than would otherwise be necessary. Thus the success of the Point Four program may be a major factor in determining whether or not we have to live in a garrison state.

The longer-run importance of this question for the domestic economy is obvious. If investment under the Point Four program saves any military and other expenditures, these savings might well exceed the amount of investment. In this event the implications for our domestic employment problem would be the opposite of those assumed before. Greater rather than less stimulation of domestic expenditure would be required to maintain high employment.

But if we turn from the long-run effects on employment to the long-run effects upon the goods and services available to our citizens, the previous conclusion remains unaltered. The gifts and military expenditures, the displacement of which we are now considering, yield no normal goods and services to the American consumer, either when they are made or later. Foreign investment to develop resources can yield a future income to the American economy. Even if we allowed

total expenditure and production to fall as a result of the substitution of foreign investment for a larger amount of military expenditure and foreign grants, the useful product available in the future to the American civilian economy would increase. And any useful employment to which we put the resources thus released would constitute a further addition to the total useful product.

These considerations are reinforced if we take into account the probable effects of foreign investment in diminishing the need for agricultural support operations and in reducing the costs of the German and Japanese occupations.

Effects on Attainment of Commercial Policy Goals. I now want to consider the implications of foreign investment for the success of our efforts to restore multilateral nondiscriminatory world trading and convertibility of currencies for current transactions. The cessation of aid would force European and other countries to take active steps to bring their dollar accounts into closer balance. Even in the absence of foreign investment from the United States, sufficient monetary and fiscal contraction alone could in theory accomplish this without use of discrimination. But there can be little doubt that in practice this prescription would not be followed alone. Direct and discriminatory controls over international trade and exchange would also be intensified or, at the least, continued with their present stringency.

Moreover, failure of the United States to invest abroad would not stop the underdeveloped countries from making every effort to develop their resources. It would restrict their progress and might force them to reduce their goals but it would also cause them to economize more rigidly on nonessential imports. This would probably require a more vigorous use of import and exchange controls than these countries now exercise and certainly a more vigorous use of them than will be required if we are exporting capital.

We should be faced with continued bilateralism or a multilateralism that excludes the United States. Such developments, even if their causes prevailed for only a few years, would set up new vested interests and create a pattern that would be difficult to reverse. I conclude, therefore, that substantial, continuing foreign investment by the United States, guided by the principles already discussed, is a necessary, if not a sufficient, condition for attaining the stated goals of our commercial policy.

The Problem of Interest and Repayment. The problem that has given rise to the greatest misgivings in discussions of foreign investment is the prospect that income on such investment will gradually increase. Unless new investment abroad increases indefinitely, income will eventually exceed the net outflow of capital and require the creditor

country to import more goods and services than it exports. The misgivings arise over two problems: the possibility and the means of securing this shift in the creditor's balance of payments, which may be called the transfer problem, and the adverse effects upon its levels of employment. The two problems are certainly distinguishable but they are closely related, since it is chiefly because of the employment effects that people fear the necessary shifts in the balance of payments will not be made.⁷ It has frequently been concluded, on the basis of numerical examples, that foreign investment is not a feasible method of maintaining employment objectives because, in the face of rising interest, dividend, and amortization payments, the gross outflow of new capital would have to rise to virtually impossible levels to maintain the same export surplus on goods and services (excluding investment income); if it did not, total employment would fall.

In connection with such conclusions I should like to repeat what a few others have already pointed out; namely, that the same analysis is applicable to domestic investment. Compound interest creates equally startling results at home. If all domestic investments paid off, the annual volume of gross new domestic investment that would be required to offset a given amount of saving at full employment would be just as startling as it is in the case of foreign investment. What does prevent interest and dividends from becoming a constantly increasing proportion of national income in the long run? Probably the chief factors are business failures, a long-run reduction on the return to capital, recurrent inflations associated with wars, and the growth of real income. I have no idea of their relative importance, which deserves far more investigation than it has had.⁸ But it is significant that at least three of the four are stimulated by the very investment of new capital that causes the growth of investment income itself. Bankruptcy results partly from the competition of newer plant and equipment while the long-run reduction in the return to capital and the rise in real income are at least in part the result of additions to the stock of capital. Thus, while investment adds to the claims of capital upon total income, it

⁷ These questions were dealt with by Messrs. Hinshaw and Lary, and the employment question was ably discussed by Messrs. Mikesell, Polak, and Young at these meetings four years ago. Cf. *American Economic Review*, May, 1946.

⁸ It would be valuable for someone to construct a balance of payments between non-financial corporations, which are regarded as normally net borrowers and users of equity capital over long periods, and the rest of the economy, which supplies them with their original capital funds. With such data it would be possible to see how successful the non-financial corporate world has been over the years in transferring interest and dividends to the rest of the economy and to see how it has done so; i.e., the extent to which it has financed the transfers it did make by developing an "export surplus" and the extent to which earnings were reinvested or were transferred by raising new capital funds. These questions, which are basic in the operation of the economy, have been neglected by empirical research workers.

also helps to wipe out the claims of old capital and to increase the size of the total income out of which the claims of capital are met.

In the international field, a general analysis of the magnitude of the transfer problem shows that the limiting value of the ratio between service on investment and new lending depends on the rate of amortization, the average realized interest and dividend rate, and the percentage rate of increase in the outflow of new capital. When amortization is a constant percentage of outstanding principal, the formula for this limiting value is as follows:

$$\frac{\text{Interest plus amortization payments}}{\text{Outflow of new capital}} = \frac{\text{amort. rate} + \text{avg. realized rate of return}}{\text{amort. rate} + \text{percentage increase in outflow of new capital}}$$

This formula, which I owe to Professor Evsey Domar, shows that if the gross outflow of new capital increases at a percentage rate equal to the average realized interest and dividend rate, a perpetual balance between imports and exports of goods and nonfinancial services will be approached. If it increases at a lower rate, an import surplus will develop. But if it increases at a higher rate, an export surplus will continue indefinitely. Where export or import surpluses develop, their ultimate magnitude in relation to the gross outflow of capital depends not only on the relation between the average realized interest and dividend rate and the percentage rate of increase in the flow of new capital but on the rate of amortization. A high rate of amortization tends to keep down the ultimate size of the net balance of goods and services necessary for payments equilibrium, irrespective of whether this net balance is a surplus of exports or of imports.

This analysis helps to evaluate the conclusions drawn from the usual numerical examples. Most of these examples either assume a constant amount of lending or assume that the development of what looks like a large import surplus is necessarily a catastrophe. The first assumption is a special case and cannot provide a valid basis for a general conclusion about transfer difficulties; continuous expansion of lending may yield a different result. The resulting large dollar figures for gross and net investment may not represent horrifying proportions of total income if growth of income is not ruled out. The growth of income, even at rates lower than those actually experienced in the past, yields equally startling results if projected into the future. Nor need an apparently large import surplus arising from a lower rate of growth in foreign investment cause employment difficulties. Such difficulties arise only if that import surplus develops too rapidly or reaches too high a proportion of national income. The questions to ask are whether tolerable levels and rates of increase in net and gross foreign investment and national income are associated with tolerable rates of change

in the balance of goods and services and whether this balance reaches tolerable limits.

To illustrate what would be required to prevent an import surplus from ever developing, let us assume that next year we invest 5 billion dollars abroad at an average return of 4 per cent a year. To avoid developing an import surplus, our net foreign investment would have to increase by 4 per cent a year. It would reach about 35 billion dollars a year by the end of the century. However, if gross national product in money terms increased in the next fifty years at the same rate that Kuznets estimates real national product rose from the decade of the seventies to the twenties, it would reach about 2 trillion dollars in 1948 prices by the end of the century.⁹ On that assumption, the 35 billion dollars of net foreign investment would be only $1\frac{3}{4}$ per cent of the gross national product.

This example assumes a percentage growth of national product at something over 4 per cent a year. If the rate of growth is lower in the next fifty years, however, a proportionate decline in the rate of growth of net foreign investment would still permit the present dollar export surplus to be maintained indefinitely by net foreign investment of $1\frac{3}{4}$ per cent of gross national product. Only if the rate of growth of total product fell more rapidly than the rate of growth of net foreign investment would the income on foreign investments rise indefinitely in relation to national product. In that case the rate of return on these investments would also have to be reduced if an import surplus were to be avoided.

Let us take another example in which an import surplus does develop. Suppose that we were to make new loans and investments abroad next year of 5 billion dollars, which is about 2 per cent of the gross national product, and that we increased this lending and also our total product at the rate of $2\frac{1}{2}$ per cent a year. Suppose, further, that realized income on the new foreign assets averaged 4 per cent a year and that the new assets were amortized at 5 per cent of their outstanding value each year. We could immediately cut public grants abroad by 5 billion dollars and still have an export surplus of goods and services, excluding investment income, until the early seventies.¹⁰ An import surplus would have to develop after that in order to transfer the interest and amortization on these new assets. But this import surplus would never exceed 20 per cent of the new foreign lending. Its dollar value

⁹ According to Kuznets' *National Product Since 1869* (p. 119), gross national product in 1929 prices rose from an annual average of 10.3 billion dollars in 1869-79 to 77.8 billion in 1919-28, or by 7.55 times. Gross national product in 1948 was 262 billion dollars and 7.55 times this is 1,978 billion dollars.

¹⁰ To simplify this calculation, net income and amortization payments on existing foreign assets and liabilities are assumed to remain unchanged in the future.

would appear very great in terms of present magnitudes but it would never exceed four-tenths of one per cent of the gross national product.

This is the same kind of problem Professor Domar has dealt with in his paper on "The Burden of the Debt and the National Income."¹¹ His conclusion that an increase in the ratio of interest on domestic debt to total income can sometimes be restrained by a more rapid increase in debt is applicable also to foreign investment. Thus the general conclusions sometimes drawn from numerical examples would be different if service charges were considered in relation to a growing instead of a constant amount of foreign investment and total income.

These problems, invariably raised in connection with the servicing of foreign investment, have only recently begun to command attention in connection with the maintenance of high employment by domestic investment. The reasoning from special cases that leads many to conclude that full employment cannot be maintained by foreign investment should also lead them, if they are to be consistent, to conclude that it cannot be maintained by domestic investment. How long either type of investment can be maintained is a matter for speculation. But it seems obvious that, however large the field for further investment within the United States, recognition of the opportunities abroad and of their potential expansion as development gains momentum would greatly expand the field for investment as a whole and provide a longer time in which to make whatever adjustments may be necessary to expand the relation of consumption to income.

If there should develop a problem of adjustment to an import surplus, it would develop only gradually if interest rates are kept low and income expands satisfactorily. In any case, it seems clear that the adjustment required with foreign investment will be simpler than that required without it. With no net foreign investment and a cessation of extraordinary government aids we should have to adjust to a decline in our export surplus of employment-creating goods and services of about 5 billion dollars between 1949 and 1953. With a program to maintain a flow of capital abroad for a period of several decades, such as the Point Four program envisages, a larger absolute adjustment might be necessary but there would be ample time to make it.

Policies That Help to Transfer Interest and Principal. Economic history indicates that the balance-of-payments adjustments necessary to permit transfer of interest and principal have often occurred without deliberate actions of policy by either creditor or debtor countries. Our limited experience of the postwar world suggests, however, that the adjustment may be more difficult than in the past and therefore be more dependent upon deliberate actions of policy on our part, as

¹¹ *American Economic Review*, December, 1944.

creditors. This conclusion is not based merely on the presence of a "dollar gap" in the postwar years but on the view that some of the factors contributing to it are permanent facts of the postwar world. The most important of these factors seems to me, first, the determination of the industrialized countries of Western Europe to maintain high real and money incomes and, second, the determination of the underdeveloped countries to pursue capital development vigorously in order to develop their resources and raise their standards of living. Both of these factors make for a persistent tendency toward intense demand in these countries for both foreign goods and their own exportable production.

Of course, the responsibility for keeping this demand within bounds belongs to other countries. But if the balance-of-payments adjustments do have to be helped by deliberate action on our part, what are the policies required? Reduction of import barriers is of course one obvious policy. It is now generally recognized that the maintenance of maximum real income is another. But this may not be enough, since it is relative money incomes rather than relative real incomes that affect the balance of payments. If debtor countries enjoy their growing real income in the form of rising money incomes and stable (or at least not declining) prices, as they appear likely to do, while we enjoy ours in the form of stable money incomes and declining prices, the adjustment may be difficult. Exchange rate adjustments would be one method of easing any difficulties arising from different ways of distributing secular increases in productivity. But large, occasional changes are disturbing and small, frequent changes are not likely to be made. The balance-of-payments situation provides one reason—in my opinion, one among several—why we should take our secular increases of productivity in the form of rising money incomes and stable prices. Probably the best, perhaps the only, way to achieve this result is to raise the general level of money wage rates in proportion to the increase of average productivity and to do so year in and year out, making exceptions only when there are unusual conditions not normally met with in the course of ordinary cyclical changes.

If moderately expansionist domestic policies are pursued, the receipt of interest through the gradual development of an import surplus of goods and services should not be difficult for the American economy unless secular inflation is permitted to develop abroad. The reduction of import barriers and of export subsidies, if pursued gradually, would probably not have a great impact upon the economy as a whole. Considering the primary role played by relative money incomes and prices in determining the balance of payments, there is little doubt that monetary expansion permits a surplus of imports of goods and

services to be achieved without impairing the goal of maximum employment. The major question is not whether this can be done but whether it can be done without inflation. This depends in part upon the policies pursued by other countries and in part upon the degree to which a given noninflationary addition to money income in this country brings about an increase in our spending on imports and domestic exportable production.

The development of an import surplus may of course involve serious difficulties for particular industries. This is a possibility that is not to be dismissed lightly. Even these difficulties may not be so great, however, if a gradual but persistent expansion of demand elsewhere in the economy makes it possible to find alternative opportunities for employment and capital. Perhaps even more important for the people concerned is the fact that in a growing economy export and import competing industries might not have to undergo absolute but merely relative contraction. Finally, mere failure to attract new entrants to replace workers who retire, die, or leave in the normal course of events may permit an industry to contract gradually, even in absolute size, without widespread injury to individuals.

It is curious that people who have misgivings about the gradual development of an import surplus ordinarily have none whatever about increases in productivity. These two types of change have the same implications for the employment problem. Both give us more goods for the same amount of work and thereby provide us with the opportunity to attain a higher standard of living but neither contains any guaranty that we will use the opportunity. In both cases we will have involuntary unemployment if we do not.

DISCUSSION

LEROY D. STINEBOWER: Scratch the surface of the discussion of any economic topic in any international conference or organization for the past five years and you are practically certain to uncover the words, "economic development." Not only does economic development command more discussion in its own name than any other economic subject before the United Nations and other international organizations; it is impossible to debate or pass a resolution on other subjects, for example, full employment, without also again giving consideration to economic development. In a very literal sense, economic development has become the economic shibboleth of our times—the watchword for every international economic discussion.

Despite all the excesses of oratory and polemics which have been uttered in the name of economic development, it would be a great mistake, in my opinion, lightly to dismiss the reality and the intensity of the "drive" for economic development. It has much in common with all manifestations of the traditional case for infant industries, but as Mr. Singer has noted there is much more to it than that. It is prestige and economic nationalism, political nationalism, and standards of living all mixed together. It is intimately linked with the stirrings toward greater political self-government or independence among the peoples of many of the underdeveloped areas of the world. In this period of ferment, the aspirations toward economic development take on significance for us, as Mr. Salant has observed, for political and security reasons, but certainly our self-interest in these stirrings is not confined to this aspect. The vigor of the insistence upon the claims of the underdeveloped areas is also in part an outpouring of the feeling of frustration that the repair of the ravages of war have had to take precedence in the use of the world's resources over the aspirations of other areas for a greatly accelerated wave of development. In part it is also an expression of the feeling that colonial and underdeveloped areas have been exploited in the past and must find a way of tapping foreign technical and financial assistance without becoming economically or politically subordinated to the sources of assistance.

It is a principal merit of Mr. Singer's paper that he has not ignored many of these factors which are so often neglected in the purely analytical economics of foreign investment. But I am not sure that the same merit extends to his analysis or prescriptions. The paper might perhaps be described as a rationalization in sophisticated terminology of the constant complaint of all capital-hungry regions wherever found, whether it be the frontier region of our own history or of less-developed areas, against their more economically advanced trading partners and investors.

It is a temptation to ignore my assignment and to comment in detail on Mr. Singer's paper, but I shall confine myself to noting the contrast between his conclusions and the basic assumptions of Mr. Brown's paper. The latter assumes the necessity of finding means of attracting capital into foreign investment. Mr. Singer would face such capital with the necessity of reinvesting

earnings "or else," the or else being "absorption by fiscal measures." One would guarantee the convertibility of earnings and the other would make such guarantees unnecessary by requiring them to be reinvested where they are earned; one would attempt to develop tax incentives in the capital exporting country and the other would nullify this action by "fiscal measures" to absorb profits. Without further clarification, at least, it would seem difficult to see how both programs could simultaneously contribute to the same end.

My main assignment, however, is to comment on Mr. Salant's paper. I shall confine myself to two general comments relating to (1) the relation between United States foreign investment and the European dollar problem and (2) the need for reasonable stability in the rate of investment.

Mr. Salant has devoted a major section of his paper to the potential contribution of United States foreign investment towards closing the "dollar gap" after 1952, on the assumption that the European Recovery Program ends then as scheduled. He concludes with some optimism that a substantial export of capital from this country by contributing to a constructive solution of the European dollar problem could at the same time obviate the necessity of painful readjustments to the export problem with which we might otherwise be faced.

But he has also indicated some very sizable problems to be overcome. American loans should not be tied by the requirement that the proceeds of the loan be spent directly in this country, equity investments in general should not be overstressed because by and large they tend to have the same initial effects as tied loans, and the general practice of limiting loans, at least public loans, to the cost of imported capital goods should be relaxed in favor of including the dollar equivalent of local currency costs of a development project as well.

It can be readily agreed that these conditions would be necessary if United States investments, public or private, in non-European areas are to make a direct contribution to Western Europe's dollar problem. But their mere enumeration also indicates the difficulties in the way. Two of them—discouragement of equity investments and loans to cover local currency expenditures—raise significant problems in connection with the ability and convenience of the receiving country to service the investment. As far as private investment is concerned, direct (equity) investment seems at present to be the principal form in which it is willing to venture abroad. Finally, although the devaluation of European currencies may have helped in re-establishing European ability to compete in the supply of capital equipment, there can be no doubt that a very considerable portion of the proceeds of American loans would continue to be spent in this country, even if loans are made completely free of tying conditions. For all of these reasons and under the most favorable assumptions, only a part of the proceeds of United States foreign investments in non-European areas is likely to be transferred by triangular settlements into a means of settling European balances with the United States.

This is not to dismiss, however, as irrelevant the impact of United States foreign investment on Western Europe. In addition to potential European

exports of capital equipment to which Mr. Salant refers, there may be expected some less immediate effects from which he has abstracted. The development of new sources of supply and the increased purchasing power of newly developed areas should both operate over a somewhat longer period to relieve the abnormal trade dependence which Western Europe has had on the United States since the war.

There is a further consequence of this somewhat less optimistic appraisal of the direct contribution of United States foreign investment to the European dollar problem. Under Mr. Salant's assumptions (or perhaps it would be more accurate to say hopes) not only would foreign investment, together with increased imports, help to maintain United States exports at something near present levels but the present pattern of exports would be more or less maintained, especially with respect to exports to Europe of those agricultural products which are likely to be "our problem commodities." To the extent that foreign investment is more largely reflected in exports of capital goods to underdeveloped areas, either some readjustment in our pattern of exports would be indicated or other means will have to be devised for our remaining export problems.

Foreign investment has an important function to perform but is not the only possible element of adjustment in our balance of payments. If it can contribute significantly to the closing of Europe's "dollar gap" so much the better, but too much should not be expected of foreign investment in this connection, nor should it be written off as having failed if it does not prove adequate to the whole task of adjustment of our international payments.

My last comment is one of agreement with one of the implicit assumptions of the paper. The similarity of the economic aspects of domestic and foreign investment has been appropriately emphasized. In both cases, investment can be an element of great stability or of great disruption in an economy. At the close of the twenties our first major venture into foreign investment came to an abrupt halt with serious consequences to ourselves and to countries whose balances of payments were adjusted to an annual outflow of about a billion dollars from the United States. Without subscribing to the need for such continuous and progressive investment as to support the astronomical figures of Mr. Salant's arithmetic, and without accepting the desperate need to go on forever avoiding an import surplus for this country, it must be agreed that more important than the absolute initial magnitude of United States foreign investment is the need that the rate of net foreign investment or disinvestment be reasonably stable if that investment is to make its most fruitful contribution to our domestic economy, to the economic development of underdeveloped areas, and to our international relations.

B. K. MADAN: I propose to make the paper by Mr. Singer my first responsibility in the discussion, though I could not help straying into the fields of the other papers.

I believe the theme or broad conclusion of Mr. Singer's paper is that in the distribution of the gains of trade between underdeveloped and more highly developed countries, the latter have reaped the main harvest of benefits flow-

ing from such economic intercourse, and the former have on the whole suffered from the excessive degree of specialization of economic activity which restricted the role of underdeveloped areas to that of producers of food and raw materials, and subjected them to a continued deterioration in their terms of trade with countries having more diversified manufacturing economies. Accordingly, a change in the pattern of development of underdeveloped areas and consequently in the nature of international economic intercourse, assisted by substantial flows of foreign investment, is indicated if economic development is to go forward along lines which contribute to the maximum welfare of the countries undergoing development as well as of the highly developed countries assisting in such process. With his argument thus broadly stated, I am in general and hearty accord.

But a related question to which we have to address ourselves is: what are the implications for practical policy of this analysis? How far does an acceptance of the gist of Mr. Singer's analysis affect the outlook for industrialization of the underdeveloped countries and the means available therefor? To what extent can a keen realization of the inadequacy and unsatisfactory nature of past development which Mr. Singer's paper strikingly demonstrates furnish the incentive and the wherewithal for more satisfactory performance henceforward? When we come to grips with the problem, survey all its elements, and assess the difficulties, it does appear that there are real dangers if we see in finance alone the cure-all for effecting a rapid transformation of the economies of underdeveloped countries into modern, efficient, well-run industrial communities. We have to appreciate the comprehensive transformation in the character of the economies concerned which is involved in the process—a transformation which has not only to reckon with a low level of domestic capital formation and of general technical attainment in the underdeveloped countries, even where the population has a long tradition of skill and adaptability, but often a transformation in social outlooks, in health standards, and in educational levels—all of which emphasizes the need for a comprehensive and many-sided approach to the problem of achieving a durable economic advance and consequent improvement in the standards of living of the people in the underdeveloped areas.

In particular, the limited resources available to underdeveloped countries, generally, render necessary a discriminating use of such resources in a steady and progressive development of the structure of production, starting from relatively simple and moving forward to more elaborate forms of industrialization. The simpler forms of industrialization involve smaller outlays of capital and, in general and to start with, underdeveloped countries have better chances of attaining a full measure of success in respect of them than in embarking at once upon ambitious programs of rapid development of heavy industries involving considerable capital outlays. Noneconomic considerations will undoubtedly require the establishment of heavier industries in these countries at the expense of less capitalized industries which could give more abundant and quicker returns in consumable goods, and economic considerations, too, will justify the establishment of new heavy industries in many cases, but a conscious discriminating choice of this character is in a different category from expectations of a metamorphosis of the economy resulting from

simultaneous, all-sided, and indiscriminate development. Insofar as development is to be promoted with the aid of foreign investment, particularly of foreign funds made available in the form of loans, a poor and undeveloped country can the less afford such borrowing for unsound and less productive projects, and should be the more concerned to see that such investment goes forth only in projects which add most decisively to the productive and repaying capacity of the economy, so as to minimize the burden of foreign obligations.

Some of the limitations imposed upon the character of the industrialization process derive from the facts of the situation in the underdeveloped countries, where, despite the undoubtedly vast potentialities of development, the extent of immediate practical possibilities of productive investment is limited by the necessity to do a considerable amount of groundwork in closely related fields so as to avoid a repetition of the very process that Mr. Singer has described—of a state of things where investment from without fosters a development that remains awkwardly artificial and unassimilated. If the new development is to have broad and deep and durable foundations or is to be woven into the fabric of the economy, it must of necessity be slower than the exploitation of the most obvious possibilities in the way of extraction of metals and minerals and cultivation of food and raw materials for a growing world market. Fundamental to effective industrialization is a wider cultivation of the knowledge of modern techniques and processes and of technical proficiency and skill. We should all welcome in this regard the initiative so recently assumed by the United Nations at the instance of the United States to emphasize the great and deep significance of the wider diffusion of industrial and scientific techniques and technological skill as a means to more successful economic development.

Nothing that I have said so far should, however, lead us to underestimate the importance of a vastly greater volume of international investment, particularly of private foreign investment, which combines the advantages of capital, technique, and organization, for the purpose of helping forward the process of economic development of underdeveloped areas. As Mr. Brown has remarked in his valuable contribution to the subject, the problem of the resumption of foreign investment is beset with peculiar difficulties owing to the emergence of new political and economic elements and attitudes in the world and the perhaps not-too-happy background of some investments in the past from the point of view either of the investing country or of the country in which the investment took place.

Mr. Brown makes a reasoned and powerful plea for recognition of the viewpoint of the underdeveloped countries in several matters in regard to which other recent international and regional accords like the I.T.O. Charter and the Bogotá declarations also lend support to their viewpoint. On their side, the underdeveloped countries, I believe, increasingly appreciate the just desire of the foreign investor to protect his investment against certain defined and calculable risks with the joint efforts of the countries desiring investment and the countries desiring to export capital. Mr. Salant's paper brings out the significance of international investment to the economy of the capital-exporting countries, and I think the best hope for success in breaking

the stalemate lies in the mutual understanding of the respective viewpoints of the capital-importing and -exporting countries and in mutual accommodation to the basic requirements of either side, founded on a genuine appreciation of the real value of international capital flows both to the economies of the capital-importing and capital-exporting countries. Capital-importing countries will be wrong if they place too much reliance upon the necessity of the situation impelling countries with a capital surplus to dispose of such surplus, as they would sometimes a commodity, on terms which do not satisfy the minimum reasonable claims of the investors. Capital-exporting countries will be wrong if they do not for their part base their policies on recognition of the changed atmosphere in the underdeveloped countries and of the importance of maintaining the flow of such investments to their own economies. One might grant that capital-importing countries will be the greater sufferers if the stalemate in international investment is indefinitely prolonged and yet it is true that both sides will be immeasurably better off if its flow can be resumed on a significant scale. It is not my intention at this stage to examine in detail the relative efficacy of various schemes which are under consideration to promote progress toward the agreed objective. I shall content myself at this time with voicing my conviction that it is the task of economic statesmanship in the coming years to devise arrangements for the copartnership of capital and skill from more highly developed economies with the resources of capital and labor put forth by the underdeveloped countries themselves, as they must be put forth in an abundant measure by them—arrangements which afford a reasonable opportunity to foreign capital to control and manage the enterprises which it is permitted to foster, to bear the risks of such ventures, and to reap the rewards of risk-bearing, free from the fear of expropriation without just compensation, and which at the same time respect the legitimate desire of the countries undergoing development to utilize this phase, through wide opportunities for training, to improve the technical capacity of their people so that they are able eventually to acquire control of existing or new economic enterprises which they can operate with efficiency. Such arrangements, without depriving foreign capital and enterprise of its fair share of the fruits of such economic development as it helps to foster, will insure that the gain of economic advancement accrues in a fair measure also to the people of the countries undergoing development. I believe this objective is thoroughly practical and all the efforts in this direction are entirely worth while. I believe, too, that in the process of progressive adaptation in the structure of production in the underdeveloped countries as well as in the highly developed countries, the latter if they retain the ingenuity, vitality, and vigour which gave them the initial lead, will also continually move forward to more complex forms of production, taking on themselves the tasks of fulfilling new demands as well as old demands in new ways.

BRUNO FOA: The complexity of the issues which beset the problem of U.S. foreign investment has been brought into sharp relief by the three admirable papers presented at this session. This is natural and all to the

good, since we live in a world which is vastly different from that of 1914 or even of 1938. New, vitally important experiences are unfolding before our eyes. We, as economists, are equipped with new intellectual tools, the potentialities and limitations of which have not as yet been fully tried. Moreover, we have a keener awareness than was the case in the past of certain human and social values. For these reasons we can no longer be satisfied with what Mr. Singer has called the "textbook" economics of foreign investment and international relations at large. We may be groping a bit in the dark and find ourselves for a while at a loss in our attempts to bring into a single focus the many bewildering facets of the international investment problem. But the search will bring its rewards in terms of an enriched factual experience and ultimately of intellectual light.

Mr. Singer has made a restrained yet very effective plea for the encouragement of a type of foreign investment which may lead to an increasing degree of absorption in underdeveloped areas of the fruits of imported capital and technical progress. He has also scored a most telling point, in my opinion, in suggesting that a good deal of what is considered foreign trade and investment turns out to be a projection and an outpost of the economies of the more advanced creditor countries. Mr. Salant has offered a very convincing demonstration of the reasons which make extremely desirable a large and growing flow of U.S. foreign investment: to safeguard our domestic full employment and to bring about a more satisfactory structure of world balances of payment. Mr. Brown has warned us that private foreign investment cannot be a shotgun marriage, and that it can bear its full fruit, in terms of returns, of mutual advantages, and of good will, only if it is the product of a slow and free meeting of minds between creditor and debtor countries.

With each of these basic propositions I find myself in complete agreement.

The question which perplexes me, however, is to what extent and in which way they can be reconciled, and whether foreign investment, and particularly private investment, can accomplish in a short period all the things that are expected from it and perform in accordance with the high standards on which we have set our sights.

I understand it is my special responsibility to comment on Mr. Brown's paper. I have really no major questions to raise concerning the general drift of the paper or the treatment of special points. The fountainhead of Mr. Brown's argument, as I understand it, is that while it is important that the substance and the terms of foreign investment be equitable and mutually advantageous to both parties, it is just as essential that the potential countries of investment be left free to exercise their unfettered judgment as to the convenience, in their own interest, to enter into fair and nondiscriminatory agreements with the United States. This is a fundamental proposition and a direct challenge to the suggestion from certain quarters that this country should "get tough" with prospective countries of investment and insist that foreign investment is carried only on our own terms. Mr. Brown has mentioned the treaties of Friendship, Commerce, and Navigation, which we have recently signed with Italy and with Uruguay, as excellent examples of the way in which a favorable and sound "climate" for foreign investment can be created.

My only reservation is that while this can be a proper and significant approach with democratically-minded nations, such as Italy, Uruguay, or India, and can also influence in a more liberal direction some countries which are addicted to extremes of economic nationalism, it is insufficient to take care of the more backward areas, which, while perhaps no longer colonial in a technical sense, are ruled by absolute potentates or small cliques of feudal landowners or army colonels. I would conclude, therefore, that FCN treaties, while very useful in certain contexts, have very definite limitations with respect to the areas—colonial and noncolonial—in which the native toiling population is to be protected first of all from its own government.

Having this problem in mind, but also for reasons which apply in varying degrees to most countries of investment, underdeveloped or advanced, one may ask whether it would not be a good idea to devise techniques going beyond the formal government-to-government approach and beyond treaties. One possibility might be to bring about a state of affairs under which the International Bank for Reconstruction and Development might take over some of the functions of a World Investment Authority, and become the guardian of a code of fair international investment practices. The World Bank has already surrounded its operations with a number of extremely attractive features, the potentialities of which are only beginning to be felt. I refer in particular to the co-operative way in which loan projects are worked out between applicants and the Bank and which goes far beyond the traditional type of screening. In the end, projects are the product of a joint technical effort in which the contributions of the two parties blend into a single whole. Another advantage of the Bank operations is that, while in practice they consist essentially of dollar loans and as such are under the ultimate control of the U.S. Executive Director and of the U.S. National Advisory Council, they are made by an international and not by a national agency. Thus, to a limited but significant extent, certain American lending operations take place within an international framework. Large chunks of dollars are loaned in accordance with international rather than strictly national considerations and methods.

To go back to Mr. Brown's paper. I suspect that my own inclinations might lead me closer to Mr. Singer's rather than to Mr. Brown's viewpoint in one important respect; for while Mr. Brown appears to have in mind chiefly the traditional effects of foreign investment, in terms of exploitation of resources and related growth in international trade, I am strongly inclined to attach more significance, under contemporary conditions, to the income and other multiplier effects in the country of investment so vividly illustrated by Mr. Singer. Mr. Brown's analysis, however, seems to me to be of great service precisely because it spells out so clearly the assumptions under which private foreign investment can flourish and thus, by implication, the limits of what it can accomplish, in terms of aggregate quantities and effects, in the short period.

I keep on stressing the importance of the time factor because we are not concerned only, nor even primarily, with the long-term effects of foreign investment, be this private or otherwise, but with the immediate requirements of the world economy and related American interests and responsibilities. The

year 1952 is almost around the corner, the end of the Marshall Plan is already in sight, and we are faced with the question of what foreign investment can do to aid world stability and to become a major factor in the American balance of payments within a very near future. For this reason, and without questioning in the least the cogency of Mr. Salant's analysis, I cannot help wondering whether we are not running the risk of expecting foreign investment—and private investment in particular—to accomplish too much here at home and abroad in too short a time. My doubts are particularly serious in view of the growing tendency in official and other thinking to de-emphasize the role of massive public interest lending and investment, originating from agencies such as the World Bank and the Export-Import Bank, and to lay stress primarily on the potentialities of private investment.

It is illogical, I submit, to imagine that American private investment—which is at present limited to a few special and highly lucrative fields, such as oil exploitation, plantations, mining, and utilities—may within a few years reach the proportions required to take up the slack of the Marshall Plan and other aid programs; that it may become almost overnight the stabilizer of both our domestic employment and the dollar account of the rest of the world. It is also implausible that this flow of investment can become so well diversified, geographically and in terms of main branches of activity, and that it can lead to such an equitable apportionment of private and public interest advantages in creditor and debtor countries, as to become the center of gravity of world economic stabilization.

My first conclusion is, therefore, that while there is much that private investment can accomplish, if nurtured in a free and natural atmosphere, as advocated by Mr. Brown, it cannot be, at least over a considerable number of years, a substitute to programs of outright aid to underdeveloped areas or to countries which are suffering from structural maladjustments. Nor can it be a complete substitute to a flow of what I would call "public interest" lending or investment sponsored by official or semiofficial U.S. and international agencies.

To bring about world stability we need to employ still for a while a great number of tools. If we overemphasize private investment—as there are signs we may be doing even in the still unborn Point Four—we lose the correct vision and perspective of the difficulties which are to be faced and which call for complementary correctives. Moreover, we run the risk of losing sight of certain possibilities for action through intermediate—hybrid, if you like, but quite interesting—instrumentalities, which belong to the border line between the field of public and private foreign lending and investment.

In this connection, reference can be made to the important question, touched upon by Mr. Brown but indirectly also by Mr. Singer, concerning the merits and demerits of what I would call spontaneous as against planned investment. Mr. Singer has pointed out that, in the past, spontaneous investment has often been of a type which led to an uneven distribution of gains between creditor and debtor countries, especially in terms of opportunity costs and of the vital secondary multipliers in terms of income, of employment, and of the spreading of productivity and technical knowledge. Mr. Brown, on the other hand, has observed that traditionally new countries

have not been developed by the migration of foreign capital in accordance with two- or three- or five-year plans of economic development. I do not think that the two viewpoints are basically contradictory. Actually, they lead to the conclusion that foreign investment is expected to perform two complementary functions; namely, to aid in the exploitation of specific resources and to help in the over-all development of the country of investment. And while in each concrete instance investment is invariably associated—except of course in slave countries—with a measure of both specific and general development, we are becoming increasingly aware that the actual admixture of those two elements is a matter of vital importance. Among other things, we realize to an increasing degree that, in underdeveloped countries and indeed anywhere, foreign investment does not perform an adequate function unless it helps not only to raise the level of income in the country of investment but also to improve the structure of its distribution. It is for this reason that the social marginal products of investment in, say, Arabian oil or in the tin mines of Bolivia are so distressingly low. And it is for the same reason that, so long as this type of investment will continue to attract such a large fraction of U.S. private investment, there is need for an additional large volume of socially-minded and public interest investment, promoted by agencies such as the International Bank, the Export-Import Bank, and the like.

I would like to stress that my own attitude toward private investment is a completely positive one. Moreover, it is to be noted that the large American corporations which have foreign oil, mining, or plantation interests are now exhibiting a growing sense of responsibility for the welfare of the people in the countries of investment. There are also signs that U.S. business and banking circles, partly as a result of the missionary spirit of ECA, are developing a new measure of interest toward investment and close technical relations with respect to medium-sized and even small firms in Western Europe and other industrially advanced areas. Experimentation in this field would open a new, undramatic, but extremely fruitful chapter in U.S. foreign investment policies. Altogether, it would appear that a broad but effective division of labor, and subsequent co-ordination, may be expected to take place in the immediate future between “spontaneous” and “planned” investment, with private investment taking the lead in the first field and public interest investment taking the second as its principal province.

It is even conceivable that the bridge between the two types of investment might be further narrowed through the use of some new and intermediate instrumentalities, sharing to some extent the nature and functions of private and public-interest enterprises. I am thinking about development corporations, which besides combining capital originating from private and public sources, would weld together dollar and local currency investment—thereby leading to an extension of the interesting device of the “counterpart funds.” But I am also wondering whether, in view of the fact that saving in the United States is so much a corporate and institutional function, it might not be possible to tap a fraction of it at the source and channel it toward foreign investment. I do not underrate the formidable legal and technical difficulties which stand in the way of participation in such ventures by insurance companies and other

institutional investors. It may be submitted, however, that if we do wish to release to private initiative an increasingly large share of the foreign lending job which is now handled by Washington agencies, a new approach along those lines might be well worth exploring. Among other things, the emergence of such large institutional but private agencies of foreign investment would help to spread more evenly the risks of individual operations, and it would thus help to get around the thorny question of federal guaranties, about which I share many of Mr. Brown's misgivings.

A final word concerning the prospective balance-of-payment effects of U. S. foreign investment. One of the most welcome features of the American post-war orientation is the notable change of attitude which is taking place concerning foreign imports and, in particular, manufactured imports. It goes without saying that unless this attitude is matched by the appropriate practical steps, the effects of a renewed flow of American foreign investment will be to a considerable extent frustrated. At the same time, we have to make allowance for the fact that the equilibrium pattern of an international system centered in the United States is likely to turn out to be somewhat different from that of the nineteenth century shaped by the power and the peculiar conditions of England. For instance, it is a fact that, at least in a direct and tangible sense, we are less vitally interested in imports and exports than England was and still to a large extent is. Consequently, world trade adjustments required by the creditor position of the U.S. are likely to follow a more complicated and roundabout path than was the case in the days of the English primacy. This means, among other things, that under assumptions of peace and stability there will be a tendency on our part to leave abroad a very large proportion of the proceeds of foreign investment, and that a very large proportion of total American investment abroad will be available for the purposes of general domestic development, which have been mentioned before, in the debtor country. Thus, it would appear that to the extent to which a new orientation in the purpose and *modus operandi* of international long-term investment is required, the peculiar features and requirements of the American economy are apt to facilitate rather than hinder the transition. As a corollary—and the point has been touched upon in all the three papers which have been presented to us—the principle of the “tied loans” would require prompt and careful scrutiny, for while a measure of control on end use of foreign loans still appears to me to be desirable—though I would prefer to see it handled jointly between the authorities of the creditor and of the debtor country—the time has certainly come when the tying in of dollar loans to American exports is no longer justified.

Within this broad context, I am happy to endorse Mr. Brown's analysis and conclusions almost without qualifications. For it appears to me that the cautious and long-range attitude recommended by Mr. Brown with respect to the problem of private investment in its strict sense does not preclude, and on the contrary makes even more imperative, a bold and determined approach concerning the dollar shortage and the management of the structure of world income and activity which history has thrust in so large measure into the lap of the United States.

ECONOMIC POLICY IN OCCUPIED GERMANY

EFFECTS OF TRADE AND INDUSTRIAL OUTPUT OF WESTERN GERMANY UPON AGRICULTURE

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The economy of Western Germany is adapting itself to a new set of conditions imposed by postwar policies and developments. These conditions are of two general sorts: those that determine the terms under which Western Germany can trade which are mainly external and those that determine the productivity of the resources within Western Germany. My observations bear upon the effects that trade and the emerging industrial efficiency of Western Germany are likely to have upon the structure of agriculture.

To narrow the scope of this paper I shall neglect the gains that can be achieved from a modernization of agriculture in Western Germany although substantial technological improvements are warranted in view of the marked advances that have been made elsewhere. Better techniques in farming, however, cannot increase the total income of Western Germany appreciably or quickly because advances of this kind cannot be achieved rapidly and because agriculture is so small a part of the economy. Agriculture contributed only about 8.5 per cent of the gross national product of prewar Germany. It must have been even less in Western Germany. The size of the national income of Western Germany is therefore dependent mainly upon other sectors, and industry is, of course, the main piece. In short, the productivity of industry is decidedly more important than is that of agriculture in getting at the gross product that can be achieved. Therefore, except for an occasional observation, I shall not deal with the problem of modernizing agriculture; instead, in considering the allocation of resources within Western Germany, I shall concentrate upon the industrial sector, and in doing so, endeavor to trace the effects of the level of output per head upon the demand for food and to point out some of the implications of this demand for agricultural production within Western Germany.

Agriculture in Western Germany is not only relatively unimportant measured in terms of the small part that it plays in that economy but, in addition, it cannot produce anywhere near enough food to satisfy the population of that area. Even under a policy of forced self-sufficiency, prewar Germany found it necessary to import about 20 per cent of its food requirements and it is estimated that Western Ger-

many obtained 40 per cent and more of its food from other areas. In 1948 it appears that Western Germany produced about 55 per cent of the food that it consumed. One may infer, therefore, that imports of agricultural products are necessary and that the conditions affecting trade are an important factor entering into the determination of the structure of agriculture of Western Germany.

Postwar Conditions Affecting Trade

Comparatively little insight can be had by studying the changes that have occurred within agriculture in Western Germany during 1948 and 1949 on the problem at hand because agriculture has not as yet adjusted itself to the emerging conditions. The existing pattern of agriculture is the result of the policy of the thirties and of wartime measures directed toward self-sufficiency modified by a series of emergency efforts following the war intended mainly to avert famine. To gain perspective, it is necessary to consider a fundamental question; namely, what effects will the emerging conditions under which Western Germany operates have upon the terms of trade of that area? Will the terms of trade settle at a point substantially adverse to the area compared to the terms of trade that existed prior to the war?

If it should turn out that the exports of Western Germany were to fall in value relative to its imports, other things being equal, it would be desirable that more of the resources of that area be devoted to farming than was the case prior to the war. Every discussion of this problem that has come to my attention has stressed the difficulties and usually the impossibilities of Western Germany buying food from abroad on terms as favorable as it did before the war. The reasons given for this view usually run as follows: (1) Western Germany formerly obtained a large volume of food and feed from Eastern Germany, especially from the area east of the Oder-Neisse line and these surpluses are either not available or difficult to obtain by means of "external" trade; (2) the surplus agricultural products of Eastern Europe are also no longer readily available; and (3) world-wide developments are lowering the price of industrial goods relative to agricultural products and important in this development is the fact that Western Germany must sell a much larger proportion of its industrial exports in markets already served by other well-established, industrialized countries.

Each of these changes in circumstances will be examined briefly in turn. It is true, of course, that Eastern and Western Germany were highly integrated before the war, and in the co-ordination that had been achieved, they had become complementary parts of one another whereas now both areas have been given a pronounced outward orienta-

tion. Old internal trade patterns have been disrupted and a great deal of disintegration has occurred as a consequence. For example, in 1938 the Bizone obtained all but 16,000 tons of its sugar supply from internal German sources whereas in 1948, 539,000 tons were imported; and the imports of potatoes rose from 112,000 tons in 1938 to 458,000 tons in 1948.¹ The fact that Western Germany was formerly dependent upon Eastern Germany, including the area ceded to Poland and U.S.S.R.,² for a large volume of food and feed does not allow us to infer, however, that it obtained these surpluses as cheaply as it might have purchased them from external sources. The integration that has been achieved was not based on strictly economic considerations but upon a conception of national security directed toward self-sufficiency in food. The protection given to cereals and sugar in prewar Germany creates a strong presumption that Western Germany paid a substantial price for the internal integration of food production and consumption that existed prior to the war. Potatoes may have been on a somewhat different footing although here, too, it appears that a supply large enough for food uses could have been produced readily in Western Germany and in other nearby Western European areas. When potatoes are used as food, it is not economic to transport them any appreciable distance, and, therefore, imported feedstuff (corn, barley, etc.) was in all probability a cheaper source of feed. These observations are not intended to minimize the short-run dislocations that exist as a consequence of the outward orientation that postwar conditions have imposed upon Western Germany. Nevertheless, in a long-run setting, given the time for production and trade adjustments to take place, it may well be that a large part of the food and feed that Western Germany formerly obtained from Eastern Germany and from the area that has been ceded could have been purchased and in the future can be obtained at a net advantage from other areas abroad.³

¹ Economic Commission for Europe, United Nations Economic and Social Council, *Economic Survey of Europe in 1948*. Pages 107-108 of the committee print published by the Committee of Foreign Affairs, U. S. Government, Washington, 1949. The *Statistical Annex* to the Report of the Military Governors, No. 48, June, 1948, gives the sugar imports of Bizone for 1948 at 634,900 metric tons and potato imports at 347,500 metric tons.

² The per capita production of grain in the ceded area before the war was 640 kilograms compared to 460 kilograms in the Soviet zone and 146 kilograms in the Bizone. See *Economic Survey of Europe in 1948*, cited above, p. 11, n. 16. Philip M. Raup has called my attention to a report of the Office of Military Government, Economic Division, Food and Agricultural Branch, *The Basic Structure of Pre-war German Food and Agriculture Economy and Relation of the Area East of Oder/Neisse Line* (Berlin, Germany: May, 1947). This report unfortunately has converted all food and feed into calories and it therefore overstates substantially the value of the food and feed that were formerly acquired from the area east of the Oder-Neisse line. The figures indicate that in terms of calories the rest of prewar Germany obtained about 7.5 per cent of its food from this eastern area. The percentage thus acquired for each of the main foods is given as follows: sugar 18.2, cheese 12.8, flour, food cereals, and pulses 10.1, meat 8.3, potatoes 5.7, eggs 3.0, fat, commercial 2.3, total food 7.5, feed 14.1.

³ This conception of the competitive position of Germany as a producer of food grains, hard feedstuffs, and of sugar and also of oils and fats does not imply that a very con-

Under existing conditions, Western Germany is not likely to obtain any appreciable volume of agricultural products from Eastern Europe. This area was an important source of imports just prior to the war. In 1938, 18 per cent of German imports and 20 per cent of its exports were concentrated in Eastern Europe.⁴ German trade with this area was, however, at that time anything but normal because of the forceful trading procedures with which Germany had penetrated Eastern Europe. German imports in 1929 present a better view of somewhat more normal trading relationships than do those of the late thirties. The following figures give the percentage of Germany's imports of selected agricultural products from Roumania, Hungary, Yugoslavia, Bulgaria, and Greece for 1929 and 1937:⁵

	1929	1937
Wheat	2.4	37
Barley	37	81
Corn	7	33
Pigs	0	21
Lard	0.1	31
Eggs	17	24
Cattle	10	19
Meat products	7	35
Fruits, nontropical	25	35
Fruits, tropical	6	11

It is quite apparent that the movement of agricultural products from this area to Germany just prior to the war greatly exaggerates its importance as a source of supplies relative to the earlier period. Among the principal agricultural products which Western Germany can import to advantage—food cereals, feed, fats and oils, and sugar—only one of the feed grains, namely, barley, was imported in 1929 in amounts that make an appreciable contribution to the total imports of Germany.

Meanwhile the economy of Eastern Europe has experienced drastic internal changes. Agricultural "reforms" have altered the production substantially, and, as a consequence, the classes of farm products that are produced and that are likely to be available for export also have been changed. The exportable surplus of food and feed grains and of pork and lard formerly originated mainly on large (feudal) farms. The small peasant farms into which they have been transformed are producing more labor intensive products, both of crops and of animal

siderable part of the industrial division of labor that had been developed within Germany was uneconomic when full account is taken of external prices on a free trade basis. There can be no doubt that a substantial gain is to be realized from the re-establishment of commerce within that area; my contention is simply that some of the major foodstuffs and the raw materials used to produce food were not and probably cannot be produced to advantage within Germany.

⁴ *Economic Survey of Europe in 1948*, cited above, p. 110.

⁵ Antonin Basch, *The Danube Basin and the German Economic Sphere* (New York: Columbia University Press, 1943), Table 13, p. 183. In 1928-29, the net import of wheat, including flour, of prewar Germany was about 68.5 million bushels while in 1937 it was approximately 47 million bushels.

products. Accordingly, even if trade were to become reasonably free—a rather remote possibility for the near future—Western Germany would not find Eastern Europe prepared to export the commodities which it is likely to require from external sources. This change taken by itself, other things being equal, would increase the price of food and feed grains and probably of pork and lard for Western Germany. Sight, however, should not be lost of the abnormal circumstances surrounding the penetration of Eastern Europe by Germany in the late thirties. Imports obtained during that period certainly are not an indicator of what would have been imported and exported under more nearly free trade conditions.⁶

Eastern Germany was probably an expensive source of food for Western Germany and the food acquired from Eastern Europe was not as cheap as it appeared. Nevertheless, the changes in conditions affecting the availability of food from these two areas are of secondary importance to the problem at hand. Much more basic are the circumstances affecting the general terms of trade of Western Germany. What are the prospects with regard to these?

My belief is that the terms of trade of Western Germany need not settle below the level of 1929 and can under more nearly optimum conditions become fully as favorable as they were in 1937 when they stood at better than 15 per cent above 1929.⁷ I realize that the early postwar years, unlike those following World War I, have seen the prices of primary products rise sharply relative to other product prices. Food has been dear relative to manufactures and this has placed a substantial burden upon most industrial-urban populations. Within the United States, from 1937 to the first quarter of 1948, wholesale prices of farm products rose about 32 per cent (from 1938 about 50 per cent) more than did the prices of products other than farm products and food. The parity ratio of prices received and prices paid by farmers jumped from 92 in 1937 (from 77 in 1938) to 116 for the first three months of 1948. The unit value of crude foodstuffs exported by the United States had also risen (based on 1936-38 = 100) 50 per cent more than did the unit value of exports of finished manufactures.⁸ The overseas terms of trade of Europe as a whole did not, however, shift adversely nearly as far: "in 1948 they were about 10 per cent worse" than in 1938.⁹ Meanwhile, since the first half of 1948, prices of pri-

⁶ *Economic Survey of Europe in 1948*, cited above, p. 111: "One of the difficulties likely to be encountered in the future expansion of trade is the reluctance of eastern European countries to restore trade with Germany to its former importance owing to the bitter memories left by German economic domination before the war."

⁷ *The Review of World Trade, 1938* (League of Nations, 1939), on p. 12 includes a diagram showing the export prices of Germany as a percentage of import prices.

⁸ From data appearing in the *Midyear Economic Report of the President*, July, 1949.

⁹ *Economic Survey of Europe in 1948*, already cited, p. 147.

mary products in the United States have been falling while manufactures have remained steady, and this has cut in half the lead primary products had achieved between 1938 and 1948 relative to other prices.¹⁰

As this is being written, farm prices in the United States, despite the network of government price supports and the vast operations of the CCC have receded to within 10 per cent of the position they held in 1937 relative to other wholesale prices. Plainly, the movement of primary product prices is down relative to manufactures both here and abroad. Back of this movement are certain basic developments affecting agriculture and industry. In 1947-48 as the prices of primary products were reaching their postwar peak, world agricultural production was 4 per cent below the average of 1934-38 while world industrial production in 1947 was already 42 per cent above 1938. Since then industrial production has tended to level off¹¹ while agricultural production has staged a substantial increase. In 1948-49, the output of bread grains was 10 per cent, coarse grains (barley, oats, and corn) 25 per cent, and sugar fully 10 per cent above prewar, while rice and fats and oils still lagged.¹² Without entering into a detailed review of basic characteristics of the two sets of conditions determining the prospective supply and demand for agricultural and industrial products, it is time that we free ourselves from the Malthusian gloom which has dominated recent discussions of this problem. We need to face the fact that the supply responses of agriculture, especially in those countries that produce the exportable surplus and in those that import it, are not nearly as inelastic as our Ricardian predispositions would lead us to believe and, furthermore, that the demand for food in the principal exporting and importing countries is quite inelastic both against income and price.

I am inclined to put the matter as follows: If the Western countries succeed in maintaining essentially full employment, I simply am not impressed by the arguments that have been advanced endeavoring to show that the Western trading world cannot absorb the industrial exports of Western Germany on terms as favorable to that area as those,

¹⁰ The parity ratio stood at slightly below 100 on November 15, 1949, about 10 per cent above 1937; wholesale prices of farm products in August, 1949, had settled so that instead of being 32 per cent they were less than 10 per cent ahead of products other than food and farm products, and already during the first quarter of 1949 the unit value of exports of crude foodstuff from the United States had declined relative to the unit value of the exports of finished manufactures to place them only 22 per cent ahead using 1936-38 as a base (probably less than 10 per cent above relative unit value of 1937).

¹¹ Industrial production of the United States, which accounts for nearly one-half of the world's total output of manufactured goods, rose only slightly, increasing from 187 in 1947 to 192 in 1948 and declining to 175 in 1949 while Europe, with a marked recovery in Western Germany, rose 16 per cent in 1948 over 1947, and thereby achieved its 1938 level of output.

¹² *Report on World Commodity Problems* (Washington, D.C.: Food and Agricultural Organization of the United Nations, November 21, 1949).

say, of 1929 or even of the late thirties when they were even more favorable to manufactures, even though trade with Eastern Europe and Eastern Germany including the area east of the Oder-Neisse line were to continue to stay very small compared to prewar levels.

Accordingly, given these conditions, the prospects are that Western Germany will not be under the compulsion of transferring more of its resources into farming because of basic changes in external and internal prices which determine the terms of trade of that area. This does not imply, however, that the agriculture of Western Germany should concentrate its production on foods as expensive as was the case prior to the war, if the urban-industrial incomes per capita were to remain substantially below prewar levels. The income of Western Germany, as elsewhere, is determined not only by the terms of trade but also by the available productive resources and the optimum output per head that can be achieved given the resources. It should be pointed out, however, that Western Germany may not take full advantage of the terms of trade available to it, for it may decide not to adjust its internal prices to the declining prices of agricultural products. Instead, Western Germany may embark—in fact is already doing so—on a policy of protecting German farmers. The divergences between external and internal prices of Western Germany are already fairly marked. As of May, 1949, the domestic producer price (ceiling) of corn and barley was 26 per cent and that of wheat 12 per cent below the external price f.o.b. German ports; and the domestic price of unrefined sugar was 27 per cent, margarine, 32 per cent, and that of lard over twice as high as the external price.¹³ It was quite apparent already during 1948 following currency reform that a species of equalization operations to keep German agriculture from adjusting to the structure of external prices was being viewed with considerable favor.¹⁴ The implications of this approach having as its objective the equalization of the average of internal prices and of external prices is all too obvious to require comment in this paper.

Agricultural Effects of Industrial Output

It is of course true that industry in Western Germany is the primary determinant of the level of income per head. The level of income and the way in which it is used have an important bearing upon what the

¹³ These price data are from Professor Geoffrey Shepherd's report, *A Long Range Price Policy for Western German Agriculture* for the Food, Agriculture, and Forestry Group, Bipartite Control Office, Frankfurt, Germany, June 10, 1949, mimeo.

¹⁴ D. Gale Johnson and I had occasion during the summer of 1948 to review the pricing problems confronting the military authorities in Western Germany following currency reform with special reference to agriculture. See *Price Policy for German Food and Agriculture*, Final Report, July 20, 1948, BICO Food and Agriculture, by Theodore W. Schultz and D. Gale Johnson.

agriculture of that area should produce. The income effects are fairly straightforward in getting at the demand for food. It is well known that the income elasticity of such foods as potatoes, bread, sugar, the cheaper fats like margarine, and some fruits and vegetables is substantially lower than that of such foods as butter, poultry and eggs, milk, pork, beef and mutton, and the more expensive vegetables and fruits. To indicate broadly the effects of two different levels of income with trade, let me draw briefly upon the report of July, 1948, that Professor Johnson and I prepared.¹⁵

If the industrial worker's productivity were to increase to and perhaps exceed the pre-war level, the agriculture of western Germany will have a good market for the relatively expensive food products, particularly milk, meat and eggs. If worker productivity were to level off at roughly a quarter less than pre-war, German agriculture will have to depend more on the output of cereal and root crops.

In case the productivity per worker in industrial pursuits were to equal or exceed pre-war, and agriculture were given little or no protection, the pattern of agricultural production in western Germany would become quite different from that of 1938. Bread grains, sugar and vegetable oil acreages and production would probably fall substantially; land use would become somewhat less intensive. Fodder grain acreages and pasture would expand while feed imports would become larger, livestock output might turn out to be somewhat larger than pre-war if feed grains were imported without substantial import duties. Potato acreages would remain at about their pre-war level. These agricultural effects are the consequences of the German economy becoming sufficiently productive to permit its consumers to afford large quantities of milk, meats, poultry, and eggs and to pull a considerable fraction of the labor resources out of agriculture. These effects are based on the assumption that agriculture will not be protected by tariffs and other restrictive trade devices as it was in the pre-war period. From this it follows that the crops requiring high labor inputs would not be able to compete as labor became more expensive. Thus western Germany would come to depend almost wholly upon imports for its sugar and fats and oils.

In case, however, the level of productivity of industrial workers, because of changes in the resource complex were not to exceed three-fourths of pre-war, the agriculture of western Germany will be quite similar to pre-war agriculture in several respects. Even without trade protection, the German farmer will be induced to produce more bread grains. The potato acreage would remain large. It is likely, however, that even under these conditions the sugar beet acreage (for sugar) would decline and it is almost certain that the vegetable oils would not be produced in Germany. The agriculture of western Germany will have a smaller market than it had pre-war for meat, milk, poultry and eggs. Consequently, agriculture would have less livestock than pre-war, simply because the German economy could not afford as many of the more expensive foods. Since the domestic fodder grain acreage will probably stay large, food imports would be reduced. The feed grains might, however, be hard pushed to hold their position in competition with the bread grains and root crops, particularly since the low per capita incomes would be associated with a higher level of consumption of potatoes and cereals.

The output per head of Western Germany and the purchasing power of wages per work week are currently estimated at about 75 per cent of 1938.¹⁶ Given essentially full employment in Western countries and terms of trade about equal to those of 1937, the prospects are that during the next three to five years, as I see the resource complex within Western Germany, that Western Germany may achieve an output per

¹⁵ *Ibid.*

¹⁶ Real income per head, however, is substantially lower, chiefly because of the destruction of housing; it may be in the neighborhood of 60 to 65 per cent of prewar on a per capita basis.

head approaching that of prewar. The per capita income per head is likely to exceed somewhat the target of the OEEC plan which was 90 per cent of the prewar level.¹⁷

Conclusions

The main burden of this paper is to argue that the early postwar years have put a much higher value on agricultural products relative to manufactures than the emerging conditions within the Western trading world will support during the years ahead. Agricultural products are becoming cheaper once more, and within a few years are likely to become fully as cheap, if not more so, as they were in 1937 relative to industrial products. The people of Western Germany, along with those in other industrial countries including all urban-industrial populations that can enter into this trade, stand to benefit from this shift in the terms of trade between agriculture and industry. Western Germany stands to benefit greatly because of the unimportant part that her agriculture plays in her economy and because its former imports of agricultural products from Eastern Germany were acquired at a considerable disadvantage and those from Eastern Europe by the use of much force which also has its price—and this price can be high indeed. Even though for some years to come the income of people in Western Germany were not to reach as high a level as it had attained before the war, the structure of external prices is likely to be of such a character that a larger proportion of the sugar, fats and oils, feed and bread grains required by Western Germany should be obtained from external sources, more so than before the war—provided Western Germany were to use her agricultural resources with the view of maximizing their economic output. This objective, however, is not consistent with a large measure of self-sufficiency nor with a policy designed to protect German agriculture from external competition from which it has been traditionally sheltered.

¹⁷ This is the target for 1952-53 underlying the programs submitted to OEEC in Paris for Western Germany towards the end of 1948.

THE ROLE OF FISCAL-MONETARY POLICY IN GERMAN ECONOMIC RECOVERY

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I. Introduction

From mid-1948 to early 1949, Western Germany experienced a spectacular economic recovery. With the drastic monetary reform of June, 1948, serving as the prime mover—and with ECA and GARIOA² imports, a good harvest, relaxation of direct controls, and tax reduction providing powerful support—the first phase of the positive program to rebuild the Western Germany economy was successfully completed. Productive energies and resources, which had been distorted and disorganized by a nearly worthless currency and leaky direct controls, were quickly redirected into more socially useful channels. Recorded industrial production in the Trizone spurted from 50 per cent of the 1936 level in June, 1948, to 85 per cent in February, 1949. Exports rose from an annual rate of 0.5 to 1.0 billion dollars in the same period.

But looking beyond the first eight months, one finds little basis for complacency. The February peak in production became the plateau of the next six months.³ No sustained rise in exports occurred. Unemployment rose sharply early in 1949 and more slowly thereafter, reaching 1,316,000, or 9 per cent of the total labor force, at the end of October.

The dimensions of the recovery effort that lies ahead stand out more clearly when seen against the background of recovery in other Western European countries. The index of production (1938 = 100) in Western Europe stood at 118 in the second quarter of 1949 while that in Western Germany (Bizone only) was only 73, by far the lowest of the group. On a per capita basis, Western Germany drops even farther behind, since it has had the largest increase in population of all the Western European countries.

In many respects, the present assignment of monetary-fiscal policy in Germany is much more difficult than it was prior to currency reform. The debilitating effects of worthless money prior to that reform were so pervasive that (1) there was widespread agreement on the causes of the economic malady and on the general nature of its cure,

¹ I am indebted to A. M. Hillhouse, U.S. Office, and E. F. Schumacher, U. K. Office, Allied High Commission for Germany, and to Wilhelmine Dreissig, Bank Deutscher Länder, for a steady flow of invaluable source materials.

² "Government and relief in occupied areas."

³ However, the index of industrial production rose from 87 in August to 92 in September and 93 in October.

and (2) the cure—cancellation of the monetary excess—was bound to stimulate all major areas of economic activity, thus hiding many policy dilemmas and conflicts from view. But now the easier part of economic recovery has been achieved, and the harder part lies ahead. Conflicts among various policy aims have been brought into the open, and sharp differences have developed with respect to both causes and cures.

In this paper, I shall confront fiscal-monetary policy with the particular web of problems which beset the economy of Western Germany, suggest a policy approach appropriate to their solution, and appraise the fiscal and monetary tools that are available to translate policy into action.⁴

II. *Economic Policy Objectives*

To what extent and in what form can monetary-fiscal policy be effective in Western Germany today? As in any country, the answer depends on the peculiar economic complex which confronts the policy maker—on the goals that have been staked out and on the barriers that must be overcome to achieve them.

Translated into the near-term objectives of economic policy in Western Germany, the broad goals of full employment, economic progress, optimum resource allocation, and equitable income distribution emerge as: (1) the creation of a million additional jobs (assuming 2 to 3 per cent unemployment as an irreducible minimum); (2) stimulation of an extraordinarily high rate of capital formation and the accompanying voluntary and forced saving (ECA targets postulate gross investment of 22.7 per cent of gross national product by 1952-53); (3) removal of the physical and institutional impediments which are diverting or holding resources from their optimum uses;⁵ (4) abatement of some of the crass economic inequalities which have grown out of war and currency reform.

We may, for the moment, leave aside the third objective, where the

⁴ Except as they influenced the shape and dimensions of current problems, the monetary and tax reforms of June, 1948, will not be re-examined in this paper. Among the references which may be consulted on these are: F. A. Lutz, "The German Currency Reform and the Revival of the German Economy," *Economica*, May, 1949, pp. 122-142; Horst Mendershausen, "Prices, Money and the Distribution of Goods in Postwar Germany," *American Economic Review*, June, 1949, pp. 646-672; Fred H. Klopstock, "Monetary Reform in Western Germany," *Journal of Political Economy*, August, 1949, pp. 277-292; Walter W. Heller, "Tax and Monetary Reform in Occupied Germany," *National Tax Journal*, September, 1949, pp. 215-231.

⁵ "Optimum" is used here in the sense of a free-market allocation modified to the extent required by international balance of payments, bottleneck breaking, and minimum subsistence considerations—modifications which though considerable at the present time should diminish progressively.

relevance of fiscal and monetary policy is limited, and the fourth, where its relevance is obvious. But with respect to the first and second, its relevance is largely governed by the pattern of unemployment of men and resources and the implicit and explicit barriers to their re-employment. Space is too limited to permit a detailed analysis of the contours of the unemployment map. But whether it is mainly a high plateau or a series of jutting peaks—and the nature of the peaks that do exist—requires at least brief examination.

III. *Origins and Patterns of Unemployment*

A. *Structural Influences.* At first sight, structural dislocations appear to dominate the German scene. Such factors as war damage, dismantling, the East-West split, and the influx of more than 8 million refugees bid fair to upset Germany's economic digestion for years to come.⁶ And indeed, the available unemployment data—both in the aggregate and particularly in distributions by industry, by geographical area, and by population group—confirm the impression that the problem is in considerable part a structural one.

The growth in total labor force and unemployment in Western Germany is shown in the following tabulation (in thousands):⁷

	End of Month	Labor Force	Total Employed	Total Unemployed
1948:	June	13,951	13,500	451
	September	14,282	13,498	784
	December	14,498	13,739	760
1949:	March	14,616	13,447	1,168
	June	14,772	13,489	1,283
	September	14,918	13,604	1,314
	October			1,316

This expansion of the labor force is attributed chiefly to the restoration of monetary incentives through currency reform and to such structural factors as the continuing inflow of refugees and the increasing number of unmarried women seeking work. Moreover, a strong presumption exists that unemployment which failed to respond to the strong inflationary pressures of the prereform period and early postreform period is associated with structural derangements.

Increased productivity and longer hours have reduced employment. Productivity in industry rose from 56.6 per cent of the 1936 level in

⁶ The Economic Cooperation Administration's *Western Germany Country Study, European Recovery Program* (Washington, February, 1949) sheds much light on these structural problems.

⁷ Source: *Monatsberichte der Bank Deutscher Länder*, October, 1949, p. 73. A report in *U. S. News and World Report*, December 23, 1949, indicated that unemployment had continued to mount late in 1949.

June, 1948, to 74.8 per cent in May, 1949 (although it should be noted that most of this increase took place in 1948 before unemployment rose most sharply).⁸ Average weekly working hours rose from 41.1 to 46.3 over the same period.⁹ The process of rationalization of industry—involving re-equipment, adoption of laborsaving processes and machinery, and substitution of more for less efficient labor—is going on apace, not only releasing labor, but inhibiting reabsorption of those released.

Additional evidence of structural adjustment is provided by the shifts in employment among various branches of economic activity. From June, 1948, to June, 1949, employment in agriculture and forestry fell 17.8 per cent; in service trades and public employment, 8.0 per cent; in woodworking trades, 6.0 per cent; and in transport, 3.2 per cent. Employment in consumers' goods industries rose 12.7 per cent; in heavy industry, 7.8 per cent; in other industries (chemicals, paper, etc.), 11.5 per cent; in public utilities and in insurance, commercial, and hotel trades, 6.6 per cent; and in building and related trades, 1.1 per cent.¹⁰

The most striking evidence of the segmented nature of the problem is the high concentration of unemployment in three predominantly agricultural Länder (states): Schleswig-Holstein, Lower Saxony, and Bavaria. These three Länder contain only 38.8 per cent of the available labor force, yet they accounted for 63.8 per cent of total unemployment as of September 1 and 70.9 per cent of the increase in unemployment from May, 1948, to September, 1949. As against an average rate of unemployment of 8.9 per cent for the Trizone, these three Länder had a combined rate of 14.7 per cent.¹¹

This remarkably uneven geographical distribution of unemployment is closely associated with the high incidence of unemployment among refugees. In May, 1949, this group comprised one-sixth of the population of bizonal Germany as a whole. In sharp contrast, one-third of the population of Schleswig-Holstein, one-fourth in Lower Saxony, and one-fifth in Bavaria consisted of refugees. Since the rate of unemployment among refugees was triple that of the indigenous population, the lofty peaks of unemployment in the three "depressed areas" become more understandable.¹²

These structural and secular influences have been widely cited in Germany as grounds for the pursuit of an orthodox monetary and fiscal

⁸ "Bringt Mehrleistung Arbeitslose?" *Wirtschafts Zeitung* (now *Deutsche Zeitung und Wirtschafts Zeitung*), August 20, 1949.

⁹ Joint Committee on Economic Trends, Bipartite Control Office, *Report No. 10*, Frankfurt, September 14, 1949.

¹⁰ *Monatsberichte der Bank Deutscher Länder*, July, 1949, p. 18.

¹¹ *Ibid.*, August, 1949, p. 29, May, 1949, p. 21.

¹² *Ibid.*, June, 1949, p. 23.

policy.¹³ In fact, the official inclination of the central bank—the Bank Deutscher Länder—and of the leading personalities in the economics and finance ministries of the new West German Republic may reasonably be interpreted as follows: (1) The fiscal-monetary order of the day should be mainly such conventional measures as stimulation of productive incentives through tax reduction and central banking measures to provide liquidity as the private economy gives evidence of capacity for expansion. (2) Large-scale monetary injections should be shunned since they would be likely to express themselves largely in price increases rather than absorption of unemployed resources. (3) However, owing to the low rate of savings, high liquidity preference, and sluggishness of investment—and granting that some of the unemployment is “cyclical” rather than structural in origin—energetic use should now be made of the orthodox tools of monetary expansion.

While not denying the need for caution, I submit that the present policy is too narrow in scope and too halting in application. I ascribe its inadequacy partly to an incorrect weighting of the available evidence, especially on unemployment; partly to weaknesses in the policy forming mechanism and resulting irresolution and lack of co-ordination; and partly, perhaps, to a failure to appreciate fully the potentialities of the tools at hand.

In reading the available data, undue weight has been given to structural dislocations, not only as causes of unemployment, but, more important, as barriers to a program of reabsorbing the unemployed through aggressive credit expansion and public investment measures.

B. “Cyclical” Influences. As against the evidence as to the structural nature of unemployment, one can array a number of facts indicating that much of it is generalized and cyclical; i.e., its origin is to be found in deflationary forces.

1. The rates of increase of unemployment from the end of 1948 (i.e., since the abatement of general inflationary pressures) to September 1, 1949, were higher in the more heavily industrial areas than in the three hard-hit agricultural areas.¹⁴

2. According to an analysis of labor market developments in the second quarter of 1949, the most cycle-sensitive industries showed the greatest weaknesses.¹⁵

¹³ See, for example: *Zeitschrift für das gesamte Kreditwesen*—“Die Propagandisten der Geldschöpfung,” October 1, 1949, p. 436; “Die Richtige Kreditpolitik,” September 15, 1949, pp. 409-411; “Der Monetäre Schlüssel,” August 15, 1949, pp. 361-363; and *Monatsberichte der Bank Deutscher Länder*, August (English translation), pp. 1-15, 58-67; July, pp. 15-20; June, pp. 22-34.

¹⁴ In Northrhine-Westfalia, Württemberg-Baden, Hesse, and Hamburg, unemployment increased by 85.4 per cent over this time span as against 62.4 per cent in the three chronically depressed Länder. The rate of increase for Western Germany as a whole was 72.3 per cent. *Monatsberichte der Bank Deutscher Länder*, August, 1949 (English translation), p. 51.

¹⁵ Valentin Siebrecht, “Sinkende Industrie beschäftigung,” *Wirtschaft Zeitung*, August 3,

3. Unfilled vacancies in the trizonal area shrank steadily from a level of 226,000 in December, 1948, to 125,000 in August, 1949.¹⁶

4. A field survey by the Manpower Division of U.S. Military Government in July, 1949, concluded that in considerable part "unemployment centers around lack of purchasing power on the part of individual consumers, which makes it difficult or impossible for businessmen at all levels to sell their goods at the prices asked. It expressed itself in the falling off or cancellation of orders, stoppage of production for stock, inability to collect bills, exhausted financial resources. . . ."¹⁷

Symptoms of deflation other than those immediately associated with unemployment also abound. Bankruptcies in the Trizone tripled in the first three months of 1949 and continued at a high rate (over 300 a month) through August. The average weekly value of commercial bills protested tripled from January to May and then leveled out in the summer months at about double the January rate.¹⁸

Failure to find buyers, both of consumers' goods and investment goods, was another symptom. In the late summer, purchasing power was more decisive than ration cards in determining the sales of certain rationed foods. In October, steel output fell substantially below August production, yet part of this output was being shunted to stockpiles for want of markets.¹⁹

We may reasonably conclude from the foregoing that Western Germany's large-scale unemployment consists of a hard structural core and a large cyclical overburden; that, although its incidence is felt throughout the economy, certain segments are hit disproportionately hard. However, this conclusion only partially answers the question which

1949. The same author (in "Woher Die Arbeitslosigkeit?" *Wirtschaft Zeitung*, July 16, 1949) concluded that, although both conceptual and statistical difficulties interfered with accurate measurement, a little less than one-half of total unemployment could be attributed to structural, about one-half to cyclical, and the remainder to miscellaneous causes.

¹⁶ Economics Committee, Allied High Commission, *First Report on Economic Trends*, Frankfurt, November 1, 1949.

¹⁷ Earl Beckner, Economic Advisor, Manpower Division, Office of Military Government for Germany (U.S.), "Unemployment and Underemployment in the Bizonal Area of Germany," Frankfurt, July 14, 1949, p. 29.

¹⁸ Economics Committee, Allied High Commission, *op. cit.*

¹⁹ I am indebted to E. F. Schumacher for the suggestion that, apart from the general deflationary symptoms cited above, the three depressed Länder present an almost classic picture of deflation. After maintaining close to full employment prior to currency reform in June, 1948, because of agriculture's favorable terms of trade in the postwar barter economy, their position deteriorated rapidly. Not constituting a separate currency area, they could close the gap in their balance of payments only by an outflow of cash. In the eight months prior to May, 1949, the cash reserves of the banking systems in the three Länder fell by 26 per cent while those in the other five Länder of the Bizone rose by 10 per cent. However, after April, some self-correcting influences apparently set in, since the rate of increase in unemployment was substantially less than that in the other eight Länder, and cash reserves fell less rapidly than the average for the trizonal area; namely, a 14 per cent drop against an average of 21 per cent.

monetary-fiscal policy puts to the economy; to what extent are the barriers to absorption of the unemployed physical, and to what extent are they financial?

IV. *Physical Versus Financial Barriers to Recovery*

A. *Physical Barriers.* The unemployment data we have reviewed reflect many barriers to a smooth fitting together of the available supplies of labor, raw materials, and plant capacity. Apart from these difficulties of proportioning, at what point would a bold expansionary policy encounter such explicit obstacles as lack of plant capacity, inadequate supplies of raw materials, and other bottlenecks? Despite wide differences of opinion as to magnitude and proportioning, there seems to be general agreement that unused margins exist in all of these areas.²⁰

Bottlenecks in steel, coal, transport, and power, though perhaps not broken, have been greatly widened by heavy concentration of public and private investment in these areas and by more efficient utilization. Electric power is the only one that threatens to frustrate economic expansion at an early stage—and then only under conditions of drought or interruption of the program for construction of new generating capacity. As to raw materials, specific shortages undoubtedly exist. Yet the failure of the Bizone to absorb external aid at the rate necessary to utilize the total available to it during the current fiscal year is indicative of margins here.²¹

The overdevelopment of the investment goods industries in the Nazi economy left a large legacy of plant and equipment in its wake, especially in Western Germany.²² Reconstruction has proceeded rapidly, especially in the consumers' goods industries. The latter, feeding first

²⁰ Even the conservative Bank Deutscher Länder, which in its June, 1949, report had stressed the many obstacles in the path of anticyclical policy measures, stated in its August report (English translation, p. 58): "There is no doubt, however, that already now the available production reserves would permit a higher level of production and employment, with the market equilibrium being fully maintained."

²¹ Thus, from April 1 to July 31, 1949, out of a 273 million dollars "delivery program in the industrial sector," only 131 million had been delivered, and contracts had not yet been negotiated for 82 million of the remainder. (*Monatsberichte der Bank Deutscher Länder*, August, 1949 [English translation], p. 34.)

²² Of course, much of the great volume of investment under the Nazis was in war facilities and in "conspicuous public consumption" like the autobahns, thereby resulting in many distortions. (Cf. Walter Eucken, "On the Theory of the Centrally Administered Economy: An Analysis of the German Experiment," *Economica*, Vol. XV, pp. 79-100 and 173-193, especially pp. 173-178.) Nevertheless, even during the latter half of the war, it proved possible to expand German war production tremendously without running into the barrier of plant capacity; the supply of machine tools was especially ample. (Nicholas Kaldor, "The German War Economy," *Review of Economic Studies*, Vol. XIII (1), No. 33, 1945-46, pp. 33-52.) Finally, suppressed inflation also diverted resources from consumption to investment purposes. Prior to currency reform, manufacturers diverted a substantial part of their working forces to rehabilitation, repair, and maintenance work in preference to producing for sale at legal prices.

on their favorable position in a barter economy and then on big profits from hoarded goods and wide cost-price margins after currency reform, have been able to rebuild and re-equip themselves even faster than the investment goods industries. Hence, in spite of heavy war damage and an over-all capital deficit, a surprising amount of unused plant capacity now seems to be available.²³

B. *Financial Barriers.* The existence of a considerable physical margin for economic expansion suggests that the stagnation of the Western German economy since early 1949 can in substantial part be laid at the door of inadequate financial resources. Symptoms of inadequate purchasing power have already been cited. Even more decisive is the shortage of long-term investment funds. Net investment fell short by almost one-third of meeting the programmed investment goal of DM 3 billion for the third quarter, 1949. Assuming that the planned figure was consonant with the resources available and necessary for scheduled progress towards ECA goals, it follows that there is a large deflationary gap in investment which financial policy can help eliminate.

Seeking the basic causes for the unsatisfactory rate of investment, one encounters first of all a low rate of private savings, combined with high liquidity preference. The monetary upheavals after two world wars, the bad fate of small savers under the currency reform, and the tremendous backlog of demand for both durable and nondurable consumer goods readily explain the low propensity to save. For a time after currency reform, extremely high profits served as an offset by redistributing income upward to those with a higher propensity to save. But capital formation from this source slowed down as profits decreased and liquidity preference increased. Businessmen's hunger for liquidity grew by leaps and bounds as confidence in the currency grew and physical investments no longer seemed attractive purely as a hedge against inflation. The compulsion of substantial indebtedness to the banks (to which they were quite unaccustomed) and the desire to hide large profits from the tax authorities increased this liquidity hunger.

Governmental funds finance over half of Germany's current investment program.²⁴ But there have been many delays in translating avail-

²³ Apart from potential physical barriers, the rigidities associated with cartels and the German businessman's preference for competitive *Gemütlichkeit* also limit the expansionary potential of fiscal and monetary policy. Dislike of competition is reflected in licensing and other restrictions on the rights of new entry into business, in the popularity of rather powerful trade associations, and in the emphasis on relatively stable output. The commitment recently made by the German Federal Republic to eliminate many of these restrictive practices and break up monopolies may reduce this institutional barrier.

²⁴ Out of estimated net investment of DM 2,150 million in the third quarter of 1949 in Western Germany, DM 900 million was supplied by German public budgets, DM 111 million by counterpart funds, and DM 105 million by the unemployment insurance fund. Self-financing and short-term bank credit added DM 614 million. The private capital market supplied the remaining DM 420 million. (*Monatsberichte der Bank Deutscher Länder*, October, 1949, p. 6.)

able funds into actual construction activity. Even the Reconstruction Loan Corporation, established for the explicit purpose of facilitating and accelerating the investment program, had granted loans of only DM 271 million by the end of September out of total funds of DM 445 million made available in July. Needless to say, these facts raise some question about the time factor in the economy's capacity for absorbing an injection of investment funds. To have physical capacity ready and waiting will matter little if the productive factors cannot be combined quickly enough to absorb the available funds.

A correlated difficulty is the slowness in release of ECA and GARIOA counterpart funds. Here, governmental machinery is largely to blame. The time consumed in funneling requests from German authorities to Military Government (now Allied High Commission) agencies and on to ERP authorities and then down the line again has diminished the usefulness of the counterpart funds as a flexible instrument of monetary and investment policy. The available data indicate that during the summer and early fall of 1949 more counterpart funds were withdrawn from the economy than were made available to it. In other words, an important policy tool which should have been used actively to counter deflation was actually contributing to it.²⁵

By hindsight, several of the difficulties in the investment picture can be traced to the terms of the currency reform. The impairment of the mass will to save has already been mentioned. Another adverse factor was its preoccupation with money itself rather than the capital superstructure built on that money.²⁶ Even more important in its implications for further economic recovery was the strong anti-inflationary bias of the currency reform,²⁷ especially as reflected in the decision to

²⁵ Private foreign investment, though potentially important, as yet plays little or no role in the German investment picture. To be sure, the Allied ban on such investment has been slightly relaxed, and Allied High Commission studies of further relaxation are in progress. But formidable technical barriers (associated with disposition of prewar foreign obligations of Germany) and substantive barriers (exposure to Russia) make early aid from this source unlikely.

²⁶ Indicative of this is the narrow capital basis it left the credit institutions other than the central banks. At midyear, 1949, their capital and reserves were about 2 per cent of their total assets and liabilities and 5 per cent of their advances to the private economy. Although capital depreciation was more a consequence of inflation than financial reform, the latter magnified the difficulty and thus exerted a restrictive influence on the ability of commercial banks to grant credits to business.

²⁷ This bias is seemingly contradicted by developments in the latter half of 1949, when inflationary forces generated by the reform itself had the upper hand. But these forces were inadvertencies created by: (a) the installment nature of the money issue under currency reform, which gave an impression of "more coming" and therefore contributed to the spending frenzy; (b) the excessive head quotas and original monetary creation which lay outside of the reach of central bank control; (c) the issuance of large initial allotments to the German governments in the form of central bank deposits which, as they were spent, improved the reserve position of the commercial banks; and (d) the impact of canceling 85 per cent of the blocked accounts in October, 1949, which convinced people that the occupation authorities feared inflation and at the same time fed that inflation by releasing an additional amount for spending.

cancel Reichsmark balances rather than hold them in blocked accounts.²⁸

The monetary reform left only an insignificant residual of controllable funds. Initially, it canceled 90 per cent of the money and deposits turned in for conversion, freed 5 per cent, and blocked the remaining 5 per cent. By a supplementary law in October, 1948, the occupation authorities canceled 3.5 of this 5 per cent, freed 1 per cent, and left .5 per cent for investment purposes (about DM 400 million). In the face of continued stagnation, the central banking authorities unblocked these funds for investment in designated securities and permitted amalgamation of the accounts. But in spite of the effort devoted to activating these accounts and the applause that greeted evidences of success, proposals to take similar expansionary steps on a large scale have been steadfastly opposed by the banking authorities as an open invitation to inflation.

V. Other Considerations Influencing Policy

Fiscal and monetary action cannot, of course, be guided solely by the objectives of full employment and higher productivity. It must also be responsive to other economic factors and to certain political factors. These pose troublesome dilemmas for the policy maker. For example, the fact that exports are the lifeblood of the future German economy underscores the importance of avoiding inflation in the home market. Inflation would exert a strong pull on German production to the detriment of sales abroad and would make Germany a less attractive seller and a more attractive buyer. Another economic dilemma is presented by cartels and restraints of trade. Eliminating them will remove rigidities, improve the allocation of resources, and make monetary and fiscal policy more effective—all in the long run. But in the short run, it will spell more structural readjustments, probably to the detriment of production and employment.

The dilemmas arising out of political considerations are even more disturbing and deep-seated. Certain demands of international political equilibrium run directly counter to domestic economic interests.²⁹ One

²⁸ The Colm-Dodge-Goldsmith plan for reform had opposed blocked accounts on the ground that they might threaten monetary stability. But flexibility would have been provided through a war loss equalization fund. By variations in the rates of redemption of certificates in the hands of war loss claimants and the rates of payment of interest and amortization on the fund mortgages on net wealth, the fund could have been used as a safety valve for counteracting inflationary or deflationary tendencies. Although the Colm plan is generally recognized as having served as the point of departure for the U. S. position on monetary reform, its provisions for a capital levy and equalization of burdens were not adopted. This matter has been left in the hands of the new West German Republic.

²⁹ An unpublished paper by Professor Charles Kindleberger, "The Distribution of Income, Political Equilibrium and Equilibrium in the Balance of Payments," has been very suggestive in connection with the following analysis.

instance of this is the Berlin problem. For obvious reasons of international politics, it is considered important to maintain the Berlin outpost. Yet, in a direct sense, most of the economic aid which is given to Berlin either by Western Germany or through ECA must be subtracted from the recovery effort in Western Germany. Another instance is Allied opposition to tax centralization and to a dependent central bank (on the pattern of the Reichsbank which served Hitler so well) as potential instruments of power politics, war finance, and a totalitarian rebirth. Yet decentralization and autonomy interfere with the effective integration of fiscal-monetary policies which is needed to meet the requirements of domestic economic stability.

But most decisive for policy in Germany today are the demands of domestic political equilibrium. Although the method by which recovery to date has been accomplished was probably the least of evils, "this did not make the economic recovery a social success. The increase of economic inequality between employers and workers, between the native population and the refugees, between the owners of property and goods and the holders of small cash savings put the stamp of inequity on the recovery process and invited irresponsibility and conflict."³⁰

The threat of political instability implicit in these inequalities places limits on the pursuit of orthodox policies of self-regulation through the market mechanism. If a policy of generating savings through high profits and generous tax concessions to the upper income groups is pursued too far, or if the promised equalization of war and currency reform losses is not carried out in some form, political cleavages will surely be widened. One evidence of this is the attempt of refugees, bombed-out persons, and other war losers to form a political party of their own, the *Notgemeinschaft*. If German political parties become sharply polarized, equilibrium will be more difficult to maintain.

Continuing large-scale unemployment—an anomaly in any country with such an enormous task of reconstruction and recovery before it—also increases social conflict and leads to demands for radical action. To the unemployed worker, the question of the origin of unemployment—whether from growth of the labor force, higher productivity, or deflation—is largely academic. What matters is to be re-employed. To avoid unstabilizing political developments, public policy must meet this need.

Both economic inequality and unemployment, then, involve heavy social costs. It may be necessary to incur certain economic risks—in particular, those of inflation—to avoid incurring even greater social and political risks.³¹

³⁰ Mendershausen, *op. cit.*, p. 663.

³¹ The dilemma here posed for policy in a capital-scarcity economy—greater inequality to generate savings versus greater equality to relieve social tensions—is in sharp contrast

VI. An Appropriate Policy and Its Implementation

A. *General Policy.* In an examination of the economic complex in Western Germany, the components of a monetary-fiscal policy oriented to the goals of full employment, higher productivity, and distributional equity emerge as follows: (1) a positive policy of monetary expansion to create funds for use in financing long-term investment and reducing unemployment; (2) correlated measures to assure the return flow of taxes and saving necessary to avoid inflation, with emphasis on flexibility to permit quick responses to cyclical fluctuations; (3) reduction of the inequities that arose under currency reform, either by early adoption of the final *Lastenausgleich*, or by creating blocked funds under the "shadow quota," or by a program of social investment, or by some combination of these three; (4) carefully directed investment of publicly controlled funds (*a*) to widen power, coal, and similar bottlenecks even further and (*b*) to help solve the problem of the three depressed areas by capital development programs in those areas and housing construction in industrial areas (to which some of the excess population can then migrate); (5) use of the *Finanzausgleich* (financial equalization) to provide the governments of the depressed areas with more generous allotments of liquid resources to help alleviate deflation; and (6) measures to accelerate the flow of German government funds and counterpart funds into the economy via investment projects.

B. *The Policy Tool Kit.* Western Germany has the necessary monetary-fiscal-investment tools to carry out a policy of this type, though the present dispersion of responsibility makes it difficult to mobilize and integrate these tools into a positive, consistent program. The tool kit is quite different from that of the United States. Legal restrictions stand in the way of deficit financing as an avowed countercyclical policy, and as yet there is no substantial debt to manage (evils which are not entirely unmixed). On the other hand, it has a number of instruments not available to fiscal-monetary policy in the United States: (1) counterpart funds; (2) a freer use of specific tax concessions; (3) the tradition of regular financial equalization between wealthier and poorer states; and (4) the "shadow quota" and the capital levy as potential sources of controllable investment funds. The implements of central banking policy are generally similar in the two countries, and a Reconstruction Loan Corporation in Germany parallels our Reconstruction Finance Corporation in many respects.

1. *Deficit Financing.* A dual prohibition stands athwart the path of budgetary deficits. One is the dictate of Military Government currency

to the position in a capital-abundant, high-savings economy. In the latter, except in periods of inflation, both social and economic considerations point in the same general direction—to reductions, within limits, in the inequality of income to raise minimum standards of living and broaden the purchasing power base of the economy.

reform laws that budgets should be kept in balance. The other is the prohibition in Article 115 of the new Western German Basic Law (constitution) of any borrowing except "in the case of extraordinary need and as a rule only for expenditure for productive purposes. . . ." Before one concludes that deficits have been legislated out of existence, however, several points should be noted. First, it is not clear how long the Military Government injunction is to be in effect, nor that it would be considered the better part of international political wisdom to make use of it. Second, Article 115 of the Basic Law can, by stretching the concepts of "extraordinary" and "productive" (e.g., interpreting the latter in terms of contribution to gross national product), find a legal basis for incurring deficits as part of an anticyclical policy. Third, large programs of new welfare payments and further tax reductions now under consideration by the German parliament (not to mention large food subsidies) seem to be a direct invitation to deficits, legal barriers to the contrary notwithstanding.

2. *Debt Management.* The Reich debt was canceled by currency reform. In its stead, the reform created in the banking system—to provide the banks with needed assets in place of their huge Reich debt holdings—DM 15.5 billion of equalization certificates (*Ausgleichsforderungen*). These are made obligations of the Länder and federal governments, which pay 3 per cent interest on them. Less than DM 1 billion of new debt was issued by all public authorities in the year after currency reform.

3. *Taxation.* The conservative regime in Western Germany places great emphasis on unleashing productive incentives and stimulating savings through taxation. Generous deductions were provided in the two tax reform laws in 1948 for that part of income which is devoted to savings.³² Also, the new tax reform proposal—already approved by the Federal Cabinet—would greatly reduce middle and upper-bracket income tax rates.³³ These concessions and reductions to induce savings necessarily rest on a relative shift of tax burdens from upper- to lower-income groups, and hence aggravate the problems of social disequilibrium already discussed.

4. *Central Banking Policy.* After some hesitation, central banking policy has been pushed to its orthodox limits in the interest of "sound" credit expansion. The Bank Deutscher Länder (set up on the general pattern of the Federal Reserve Bank) has lowered rediscount rates several times, has pushed required reserves down to their legal minimums, and has provided for purchase of federal treasury bills to prefinance the "Immediate Aid Program" (which is supported by an em-

³² Cf. Heller, *op. cit.*, pp. 222-224.

³³ Smaller incomes are not materially affected, but for incomes above DM 9,000 the proposed relief is substantial.

bryonic capital levy).³⁴ Even a bit beyond these limits is the provision for a limited open-market operation in the form of central bank purchases of equalization certificates from the credit institutions to provide funds for export financing and mortgage-backed long-term investment. But the creation of fiat money for investment purposes in the form, say, of a central bank credit to the Reconstruction Loan Corporation is resisted. It is charged with the Schachtian sin of following the "more money, more capital, more employment" sequence rather than the classical sequence of "more employment, more capital, more money."³⁵

5. *The "Shadow Quota."* The Third Law for Monetary Reform (Military Government Law No. 63) provided that, in addition to the basic conversion ratio of old Reichsmark balances into Deutsche Marks (generally 6.5 per cent), "the owner of old currency credit balances may be allowed a further claim of a maximum of one Deutsche Mark for every ten Reichsmarks. The extent and method of this allowance will be decided by Military Government after ascertaining the view of the competent German legislative bodies." Although the Joint Committee on Economic Trends of the Bipartite Control Office recommended in August "that the Military Governors give immediate consideration to the 'shadow quota' provision . . .," there has been no sign of action in this field.

6. *The Capital Levy and Burden Equalization (Lastenausgleich).* Only a preliminary, one-year capital levy has thus far been enacted, mainly to provide funds for public relief expenditures under the "Immediate Aid Program." At the moment, because of prefinancing through treasury bills, this has been a welcome expansionary force. Its final effect will be to support consumption very largely at the expense of investment. Undoubtedly, most forms of a more thoroughgoing *Lastenausgleich* would have similar economic effects, and this is one of the factors inhibiting action by the new German government.³⁶ However, the adverse effects on investment and undue support of consumer spending could in large part be avoided by careful control of the inflow

³⁴ Cf. *Monatsberichte der Bank Deutscher Länder*, August, 1949 (English translation) especially pp. 13-14, 58-67. Minimum reserve ratios are 8 per cent for demand deposits and 4 per cent for time deposits. They were put into force September 1, 1949 (except that 10 per cent is still required for demand deposits at banking places).

³⁵ Adolf Weber, "Hahn Contra Keynes," *Zeitschrift für das Gesamte Kreditwesen*, October 15, 1949, p. 466. Resistance to the adoption of bolder credit policies in Germany today probably arises in part from identification of the unorthodox Schacht money policies with the excesses of the Hitler regime and with the origin of Germany's suppressed inflation. That Schacht's novel schemes of credit expansion in 1933-35 were effective in expanding employment, however, is unquestionable.

³⁶ Delay is, of course, understandable on other grounds as well. The *Lastenausgleich* bristles with difficulties as to what to tax, what rates to use, and what loss claims to recognize (cf. Heller, *op. cit.*, pp. 227-229).

and outflow of funds or by using the funds for low-cost housing projects and the like rather than for direct subsidy payments.

7. *The Counterpart Funds.* By October 31, 1949, a total of DM 418 million had been made available to the German economy for investment purposes out of the local currency counterpart funds arising out of ECA and related aid programs. For the 1949-50 ERP year, the Military Governors had indicated that a total of DM 2 billion would be available in the Bizone.⁵⁷ If these funds materialize in actual construction projects, some of the deflationary gap in investment will be filled. Moreover, the possibility of varying the relative rates of accumulation and disaccumulation of these funds makes them an excellent potential source of flexibility in monetary and investment policy.

8. *Reconstruction Loan Corporation.* This government corporation, through which counterpart funds are being channeled for investment purposes, serves as a lender of last resort for those seeking investment funds. It has been besieged with applications but is slow to process them and make loans. However, a policy of acceleration, backed by larger allotments of counterpart funds or an extraordinary issue of credit from the central bank, would make it more effective. It can help alleviate the condition of the distressed areas by proper geographical distribution of the investment projects it finances.

9. *The Finanzausgleich.* This traditional instrument of intergovernmental financial equalization in Germany can contribute to relief of the three depressed Länder by more generous allocations of funds drawn from the Länder which are in a stronger economic and financial position.

C. *Use of the Available Tools.* Properly harmonized, these tools could be a powerful force for economic recovery and social justice. For example, breathing life into the "shadow quota" or some part of it, and then blocking the resulting funds for controlled release for designated investment purposes would re-employ resources and—if integrated properly with the capital levy—would help eliminate some of the inequities of war and monetary reform. Another method of creating funds for investment would be to have the Bank Deutscher Länder purchase, through the Land Central Banks, a large issue of Reconstruction Loan Corporation bonds and then use the proceeds for such socialized investment as housing projects, development projects in the depressed areas (on the British pattern), and the like. The first plan gives more weight to the "dead hand of the past," and the spending of the funds would reduce commercial bank liquidity. The second would recognize

⁵⁷ *Monatsberichte der Bank Deutscher Länder*, October, 1949, p. 5; Joint Report of the U.S. and U.K. Military Governors, *European Recovery Program, US/UK Occupied Areas of Germany, April 1-June 30, 1949*, Ch. IV.

newer claimants to aid and would increase commercial bank liquidity as the central bank funds were spent.

Clearly, these policies run the risk of inflation. They may encounter rigidities and a high propensity to consume and hence partly run to waste in price rises. But it is a calculated risk, offset against the greater risk of persistent deflation.³⁸ Moreover, given intelligent use of the policy instruments at hand, the risk need not be great. Direct public investment means a large degree of policy control over the primary effects of the expansionary program. If the multiplier and acceleration effects should begin to generate inflation, the counterpart sponge could be manipulated to achieve a net absorption rather than a net discharge of purchasing power. Much of the process beyond the initial expansionary steps would necessarily be one of trial and error, and it would have to be prepared for reversals and surprises.

It is also worthy of special comment, that contrary to the usual concept of fiscal-monetary policy—which deals principally with aggregates and with cyclical problems—the array of available tools in Western Germany can make a substantial contribution to overcoming the structural and segmental defects in the postwar economy. Carefully directed investment could help abate structural disproportions and, buttressed by the *Finanzausgleich*, could bring relief to the depressed areas.

VIII. Concluding Comments

This comparatively favorable picture of policy instruments is one of potentialities rather than actualities. The gap between the two arises partly out of conflicts of opinion, both as to evaluation of the economic problem and as to the nature of its solution. Even more important is the great dispersion of responsibility for the formulation and execution of monetary and fiscal policy. Responsibility is divided at least three ways.

First, it is divided between Allied and German authorities. For example, the Allied Banking Commission still exercises final control over the policies of the Bank Deutscher Länder; the "shadow quota" is in the High Commission's competence; and with respect to counterpart

³⁸ During most of 1949, Germany would seem to be an example of what Boulding had in mind when he suggested that even during a reconstruction period "a government which follows too straight a path of financial rectitude, balances its budget and prevents the inflation of its currency may find itself in a deflationary situation, with falling prices, a rising value of its money on the foreign exchange markets, unemployment, and trade depression." (Kenneth E. Boulding, *The Economics of Peace* [New York, 1946], p. 36.) Deflation is an enemy of capital formation since it directly encourages consumption if prices fall faster than incomes (as they have in Germany) and discourages production through destruction of profits. In general, then, a mild inflationary bias is to be preferred to a deflationary one, since a rise in prices tends to discourage consumption and encourage production through the familiar process of buying at a lower and selling at a higher price level.

funds, the Germans propose, but the ECA disposes. Second, it is divided between federal and state governments. For example, the German Board of Directors of the Bank Deutscher Länder is appointed by the Land Central Banks, not by the federal government; and tax legislative competence and revenues are shared between Länder and federal governments in a manner which is not yet finally defined and which will make difficult a co-ordination of tax policies with respect to the business cycle. Third, it is divided between the nascent economics and finance ministries of the new government—the question of which shall be responsible for formulating fiscal-monetary-investment policy will probably be resolved by forming a steering committee representing both ministries. Owing to the lack of integration on all three counts at the present time, it would be premature to expect a carefully co-ordinated policy to emerge at an early date.

In conclusion, one may observe that even in the present monetary-fiscal framework, a great deal more action is possible than has thus far been undertaken. The positive use of fiscal and monetary measures to which the foregoing analysis points is, to be sure, not in full harmony with the orthodox, free-market policies espoused by the current administration of the West German Republic. But neither is it socialization nor direct physical control of the economy. It is a half-way house of planned monetary expansion and directed investment. While incurring some risk of inflation, such an approach would offer hope of meeting the exacting—and often conflicting—demands of economic recovery and political equilibrium.

FITTING GERMANY INTO A NETWORK OF WORLD TRADE

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As long as Western Germany is unable to earn her way in international trade, she is likely to continue living on American subsidies. To earn her way, Germany must find a place in an expanding world economy. Such an economy can only come out of organizational and financial programs developed by the United States. While the spectacular recovery of Western Germany's economy makes it unnecessary for the country to continue receiving outside relief, it may fail to produce self-support and Germany may become a new source of great international disturbance. Instead of being an element of economic strength and peace among the Western nations, the revived Germany will be a disruptive force unless her economy is fitted into a viable world economy.

It is therefore necessary to preface the study of Germany's trade position and of the chances for its improvement with an attempt to clarify the meaning of a viable, expanding world economy. This can be done here only in the form of a sweeping outline and by means of a simple concept.

For the next decade at least, the international system should allow for three different positions of equilibrium, or balance, applying to three different areas. The areas of new development in various parts of the world—"young" countries from the viewpoint of industrial civilization—generally should have a surplus of imports over exports to assist their growth. Western Europe—an area of "old" industrial civilization approaching the end of growth—should aim at self-support and an over-all balance of imports and exports. The United States, in a position of vigorous "middle age," should sustain a considerable export surplus, feeding the growth of the young and sustaining the balance of the old countries. Thus, very tentatively, a viable world economy might be visualized.²

While we have not yet found a consistent approach to such a functional "division of labor" in the world economy, we are experiencing the painful need for it. Trying to achieve European viability by itself,

¹ The author wishes to acknowledge the help of Ernest Bloch, who assisted in the statistical work.

² This conception is in agreement with ideas expressed by M. Kalecki and E. F. Schumacher in an article on "International Clearing and Long-Term Lending," Oxford Institute of Statistics, Supplement No. 5, *Bulletin*, of August, 1943. The term "unbalanced equilibrium" which these authors employ may be useful to describe the position of both the new development countries and the United States.

we may face the threat of unemployment, declining living standards and economic warfare in Europe, of falling exports and employment in this country, and of unrest and political disaffection in the new development areas which receive insufficient external assistance. The lack of a consistent approach to the three-cornered balance might mislead us into seeking viability at the expense of development (e.g., curtailing India's imports to attain Britain's viability), or seeking viability at the expense of a large American export surplus (by forcing down Europe's dollar purchases), or seeking an export surplus for purely domestic purposes, i.e., financing the sale of American surplus goods without regard to viability or development needs.

The world is sufficiently unified to make it impossible for one of the three major parts to find a satisfying balance without the other two, or for two, without the third. Fitting Germany into a network of world trade thus is primarily a problem of bringing together the major parts of the world in a meaningful economic enterprise. Germany's significance to this problem is perhaps no more than that of a critical area.

1. *The German Trade Gap.* Germany's foreign trade situation today is more accessible to measurement than at any time since the end of the war. A customs area has been formed, comprising the three Western zones and the corresponding sectors of Berlin. This area has an effective currency, and the currency has been given an external exchange rate that is effective for the bulk of commodity transactions.³ In the course of 1949, the values of imports and exports have gradually come to be recorded in monetary equivalents of consistent meaning. However, there still exists the anomaly of interzonal (as distinguished from foreign) trade with the Soviet zone, through which may also flow transactions with Soviet Russia and other Eastern European countries. Through this channel and over an unevenly controlled frontier considerable trade is likely to have passed in late 1948 and 1949 that is not recorded as foreign trade.

The statistical data on which this study is based relate to the commodity trade of the bizonal area and the three Berlin appendages in the first half of 1949.⁴ The French zone is now being integrated into the larger unit, administratively and statistically.

During the first six months of 1949, Bizone Germany imported com-

³ On September 29, 1949, the official rate was lowered from U.S. 30 cents to 23.8 cents to the Deutsche Mark. Transactions linked to travel and frontier crossings, clandestine payments attached to legal commodity transactions in international trade, private remittances, and capital transactions frequently involve the free mark rates on Swiss, United States, or Dutch bourses. In New York the free rate was near U.S. 17 cents in September, 1949, and about 16 cents after devaluation in October.

⁴ They have been published in the *Monatliche Aussenhandelsstatistik des Vereinigten Wirtschaftsgebietes*, a series of monthly and quarterly publications of the Statistical Office of the United Economic Area, at Wiesbaden.

modities at an annual rate of about 2 billion dollars, exported at a rate of 1 billion, and showed an import surplus of about 1 billion on an annual basis. This import surplus, one-half of total German imports, is a rough measure of Germany's present international payments gap. It also indicates the order of magnitude of our gross subsidy, which comes under the two heads of ERP and GARIOA.⁵ It is not, however, a precise measure of the international payments gap because the foreign trade of the French occupation zone is not included. Moreover, trade in the so-called "invisibles" is not included. Britain has been contributing a small share of Western Germany's upkeep (about 70 million dollars per annum).

The gap is large compared with prewar years, on account of greater food imports and smaller exports of all kinds. If we compare the volume of foreign trade of the bizonal area in 1948 with the estimated foreign trade of the corresponding part of the Reich in 1936—that is, if we compare the trade volume of identical areas in the two different settings—we find total 1948 imports at 71 per cent of 1936 and total exports at 25 per cent of 1936. Food imports alone, however, were 117 per cent of 1936 and imports of foodstuffs of vegetable origin 202 per cent.⁶

In 1936, the bizonal area had an estimated export surplus in foreign trade of RM 360 million; in 1948, the area had an import surplus of DM 1 billion, of 1936 purchasing power.⁷ On a per capita basis, the 1936 export surplus of RM 10 per head changed into a 1948 import surplus of DM 25 per head, of equal purchasing power.

But before setting down that trade gap as something very big, let us note that the year 1936, a fashionable "prewar norm" not only in Germany, happened to mark the terminus of Hitler's first four-year plan of self-sufficiency and *Wehrwirtschaft*. Germany was not always as import-restrictive as at that time. It is true that in 1936 the tonnage of the Reich's wheat imports was only one-fourth of Bizonia's in 1948; but before the Great Depression, in 1927-28, the Reich's wheat imports were as much as five-sixths of Bizonia's in 1948. Bizonia's recent trade deficit is formidable only from the standpoint of a balanced-current-

⁵ "Government and Relief in Occupied Areas." The distinction between the "European recovery" and the "disease and unrest" subsidies has practically ceased for Germany and is about to cease for us.

⁶ These volumes measure the Deutsche Mark value of trade at constant 1936 prices. They refer only to foreign trade; what is nowadays called interzonal trade, i.e., trade with the Soviet zone, is excluded in both years. This exclusion means two different things in 1936 and in 1948. In 1948 it means little, since interzonal trade was virtually nil through most of the year. In 1936 it means the exclusion of heavy internal trade within the then Reich, a trade that used to supply Western Germany with a substantial amount of cereals and absorb some of its coal, steel, etc. See *Wirtschaft und Statistik*, May, 1949, p. 98.

⁷ *Ibid.*, p. 34.

account economy—not necessarily by the standards of the capital importing Germany of the late twenties.

As it is, a balanced-current-account economy has been accepted as the norm for postwar Germany, and targets have been set accordingly. By 1952-53 German exports and imports are supposed to balance. This may imply a limitation of external assistance in the expansion of Germany's capital facilities, and it certainly does imply a wholesome emphasis on self-support; but it also raises the serious problem of increasing export earnings to a level that will match import expenditures within a short period of time.

Assuming a level of per capita consumption expenditures 14 per cent below 1936, the Allied authorities reported to OEEC that export earnings would have to rise to 3.1 billion dollars (1948 purchasing power) in 1952-53 to match imports. Let us use the round figure of 3 billion as the target.

2. Lags and Leads in Export Recovery. By how much do German

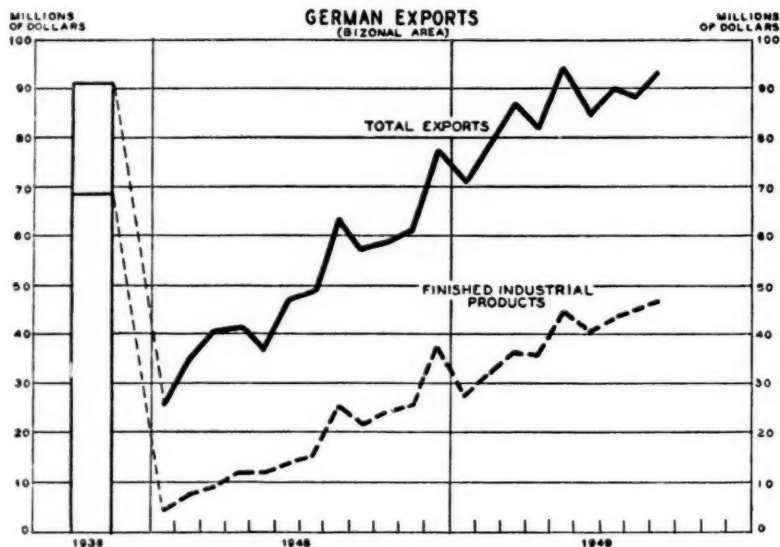
TABLE I
GERMAN EXPORTS (BIZONAL AREA)
(Millions of United States dollars)

Month or Monthly Average	Total	Finished Industrial Products
1936 (estimated)	90.7	68.5
1948		
January	25.1	3.8
February	35.0	7.4
March	40.5	9.3
April	40.9	11.9
May	36.5	11.9
June	47.2	14.0
July	49.0	15.3
August	63.0	25.3
September	57.0	21.0
October	59.0	23.9
November	61.0	25.8
December	77.6	37.5
1949		
January	70.8	27.2
February	78.8	32.4
March	86.9	36.0
April	82.1	35.9
May	94.2	44.5
June	84.8	40.2
July	90.0	43.4
August	88.2	44.9
September	93.1	46.8

Note: Data cover the bizonal area and the three western sectors of Berlin.

Source: *Monatliche Aussenhandelsstatistik des Vereinigten Wirtschaftsgebietes*, September, 1949.

CHART I
GERMAN EXPORTS
(BIZONAL AREA)



SOURCE: MONATLICHE AUSSENHANDELSSTATISTIK DES VEREINIGTEN WIRTSCHAFTSGEBIETES, SEPTEMBER, 1949

exports currently fall short of that target? In 1948, bizonal exports rose rapidly from an annual rate of 400 million dollars in the first quarter to nearly 800 million in the fourth quarter, and they reached nearly 1,050 million in the second quarter of 1949, thus approximating the dollar value of estimated monthly exports from the bizonal territory in 1936. (See Table 1 and Chart I.) In the middle of 1949, however, the rise began to slow down. Still, German exports would have to treble to reach the target. How can that be achieved?

Germany's future markets of course are not known, but her past ones are. Her present pattern of trade shows characteristic deviations from the past. The recovery of exports has not materialized in the pre-war proportions, neither country-wise nor commodity-wise. (See Chart II)

In the first half of 1949 Germany's exports^a to ERP Europe reached 78 per cent of their 1936 dollar value, her exports to North America 65 per cent, to Oceania 47 per cent. On the average, German exports to these Western-type developed areas in 1949 were 77 per cent of 1936, in terms of current dollars. By contrast, 1949 exports to Africa

^a Annual rates based on German export statistics, January to June, 1949, *Monatliche Aussenhandelsstatistik*, June, 1949. The share of the new-development areas in German exports was higher in 1936 than in 1929, except for the U.S.S.R. and Poland. In 1929, the total share of these areas was 36 per cent, compared with 42 per cent in 1936.

TABLE 2

CHANGES IN THE RELATIVE PARTICIPATION OF GERMANY, UNITED STATES, UNITED KINGDOM, AND FRANCE IN THE IMPORTS OF VARIOUS AREAS, 1938 TO 1948
(Increase [+] or decrease [-] in the percentage share of exporting country in the total imports of importing country, measured in percentage points)

Importing Areas	Exporting Countries			France
	Germany	U.S.A.	U.K.	
North America*	- 2.5	+ 3.8	- 2.2	-1.4
United States	- 2.9		- 1.9	-1.8
Canada	- 1.4	+ 3.8	- 5.0	- .3
Oceania	- 2.8	- 5.7	+ 6.8	-8.1
Western Europe*	- 4.8	+ 6.6	+ 1.4	- .2
United Kingdom	- 2.1	- 3.7		- .4
Ireland	- 3.8	- 4.8	+ 4.2	- .3
France	- 2.1	+ 6.5	- 2.0	
Netherlands	-16.7	+ 6.8	+ 1.8	+ .3
Belgium-Luxembourg	- 6.3	+ 5.7	+ 1.6	-6.5
Switzerland	-17.7	+ 9.2	+ 2.6	-6.3
Austria	- 4.3	+29.5	+ 1.2	
Germany	-	+42.1	+ 6.7	+3.3
Scandinavian Countries	-18.9	- .4	+ 2.7	+1.9
Iceland	-20.0	+16.1	- 1.0	
Denmark	-21.0	- 1.7	- 5.8	+2.8
Sweden	-19.6	- 3.7	+ 6.8	+2.5
Norway	-16.9	+ 3.1	+ 4.7	+2.8
Finland	-16.4	+ 2.7	+ 3.3	+ .9
Southern Europe	-23.4	+19.8	+ 1.9	-1.6
Italy	-21.2	+18.3	- 1.5	-1.1
Greece	-27.9	+58.4	- 1.1	+ .2
Spain	-23.8	- 3.1	- 3.8	-8.0
Portugal	-16.3	+ 9.0	+ 7.4	+2.7
Turkey	-40.7	+25.5	+11.1	+2.2
Other Mediterranean countries	- 2.3	+14.7	+27.7	-1.9
Eastern Europe	-21.0	- 6.6	- 4.7	-2.2
Czechoslovakia	-18.7	- 6.0	- 1.0	-2.2
Poland	-14.8	- 1.5	- 5.9	-1.9
Rumania	-32.0	+ 3.3	- 1.3	-8.0
Hungary	-28.9	- 1.5	+ 3.2	+1.0
Yugoslavia	-27.7	- 3.4	+ 1.0	+ .2
Bulgaria	-49.1	- .4	- 1.3	-3.4
U.S.S.R.	-14.6	-18.0	-13.2	-2.4
Latin America	-12.0	+20.0	- 2.8	-1.3
Africa	- 4.7	+ 7.9	+ .8	+3.2
Asia	- 6.6	+12.6	+ 5.2	+ .9

* Excluding imports of the respective exporting country.

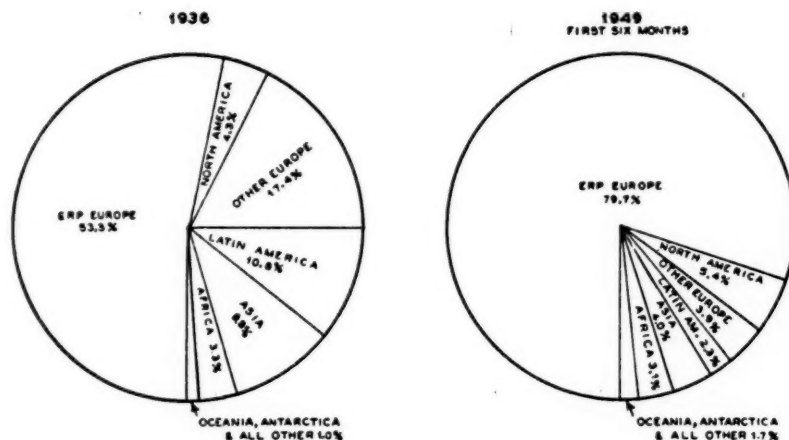
Source: ECE, *Economic Survey of Europe in 1948*. See footnote 9.

were 48 per cent of 1936, to Asia 21 per cent, to non-ERP Europe 12 per cent, and to South America 11 per cent. On the average, German exports to what we may call the new-development areas were only 18 per cent of their 1936 dollar value.

As a result the share of the developed Western countries in German exports rose from 58 per cent to 86 per cent from 1936 to 1949, while that of the new-development areas fell from 42 to 14 per cent.

Generally speaking, Germany's loss of markets was most severe in the areas of new development. This did not result from a shrinkage of

CHART II
GEOGRAPHIC DISTRIBUTION OF GERMAN EXPORTS



SOURCES: - 1936: STATISTISCHES JAHRBUCH FÜR DAS DEUTSCHE REICH, 1937, BERLIN, 1937.
1949: MONATLICHE AUSSENHANDELSTATISTIK DES VEREINIGTEN WIRTSCHAFTSGEBIETES,
JUNE 1949, WIESBADEN, 1949.

the aggregate imports of those areas, since these imports shrank neither absolutely (in current dollars) nor relatively to total world imports. Germany's share in their imports declined, and that decline was much more spectacular than that of her share in the imports of Western Europe, and of the developed Western countries in general. (See Table 2.⁹) Her place was taken by exports from other nations.

⁹ For this analysis, the data published in the ECE's *Economic Survey of Europe in 1948* (Washington, 1949), Table XVI, provide the most up-to-date material. The comparison is between 1938 and 1948. The German trade area considered in the source seems to have been larger than the Bizone. The trade data are incomplete, particularly for non-Western countries, and a number of figures are estimates. No breakdowns are given for Africa, Asia, and Latin America, and the material does not permit the showing of "developed" countries separately in these areas. Our classification of countries as "developed Western-type" is quite tentative.

Total imports of Latin America, Africa, Asia, and Oceania have been obtained from

TABLE 3
BIZONAL EXPORTS TO VARIOUS COUNTRIES, JANUARY-JUNE, 1949, IN
PER CENT OF 1936 EXPORTS OF THE GERMAN REICH
(Based on dollar values)

Countries	1949		Countries	1949	
	Bizonal Exports In Per Cent of 1936 Exports to Listed Countries	In Per Cent of 1949 Total Bizonal Exports		Bizonal Exports In Per Cent of 1936 Exports to Listed Countries	In Per Cent of 1949 Total Bizonal Exports
Belgian Congo	200.0	.2	Union of So. Africa||	28.8	.7
France and Saar	173.9	17.8	Denmark	25.0	1.8
British Colonies and Mandates in Africa†	169.5	1.8	Philippines	24.4	.1
Belgium-Luxembourg	143.5	12.2	French Colonies and Mandates South of Sahara*	23.1	—
Austria	142.4	6.2	India, Pakistan, Burma	23.0	1.1
Other Asia††	102.3	.4	Ireland	22.2	.1
Ceylon	83.3	.1	Czechoslovakia	19.8	1.1
United States	70.1	4.8	Colombia	15.5	.3
Sweden	65.3	6.0	Portugal	15.1	.2
Switzerland	64.7	5.9	Finland	15.0	.3
Netherlands	64.7	10.3	Yugoslavia	14.2	.4
New Zealand	63.6	.2	Brazil	13.1	.7
Syria-Lebanon	60.0	.1	Central America¶	11.3	.2
Netherlands E. Indies	59.7	.9	Other Africa§	11.1	—
United Kingdom	57.9	9.5	Iceland	11.1	—
Greece	56.7	1.4	Mexico	11.0	.2
Norway	54.8	2.0	Other America**	10.0	.1
Italy	52.2	5.0	Egypt	9.3	.2
All Countries	52.2	100.0	Uruguay	9.0	—
Venezuela	50.0	.5	Albania, Bulgaria, Hungary, Rumania	8.7	.8
Siam	46.2	.1	Japan	8.0	.2
Iran	45.9	.6	Peru	6.9	.1
Australia	44.6	.6	Argentina	4.6	.2
Canada	40.0	.6	Chile	4.0	.1
Poland	37.2	1.1	Spain	2.9	.1
Turkey	34.6	1.1	Palestine	2.7	—
British Malaya	31.0	.2	China	1.1	.1
French No. Africa‡	30.0	.1	U.S.S.R. and Baltic	—	—

* French West Africa, Madagascar, former German Cameroons, and Togoland.

† British East Africa, British West Africa, Tanganyika, North and South Rhodesia.

‡ Algeria, Tunisia, French Morocco.

§ Liberia, Italian East Africa, Mozambique, Portuguese East and West Africa, Canary Islands, Abyssinia, Anglo Egyptian Sudan.

|| Including former German South West Africa.

¶ Costa Rica, Cuba, Dominican Republic, Guatemala, Haiti, Honduras, Nicaragua, Panama, Salvador.

** Bolivia, Ecuador, Paraguay, British possessions in America, Dutch possessions in America and all other America.

†† Iraq, Indochina, Hong Kong, Afghanistan and other Asiatic countries n.e.c.

Source: *Statistisches Amt des Vereinigten Wirtschaftsgebietes*, "Monatliche Aussenhandelsstatistik des Vereinigten Wirtschaftsgebietes," Ergaenzungsheft: Der Aussenhandel.

1936: nach Erdteilen und Laendern, January-December, 1948, p. 59.

1949: *Ibid.* Ergaenzungsheft, January-June, 1949, pp. 12, 13.

In the imports of large parts of the world, declining shares of German exports have been matched by increasing shares of United States and British exports between 1938 and 1948. Replacement by United States exports was conspicuous in France, Belgium, Austria, Italy, Greece, Canada, Latin America, and Asia; and by American and British exports jointly in Portugal, Turkey, and various African countries. Replacement by British exports was also indicated in Oceania and Ireland. France showed a noticeable gain in her share of African markets and, together with Britain, slight gains in Scandinavia. The United States, Britain, and France failed to take up the share lost by Germany in the Scandinavian countries, in Switzerland, and particularly in Spain and in the Iron Curtain countries.¹⁰ But in Africa and Asia they gained more than Germany lost, and in Latin America, the gain of the United States more than offset Germany's loss. The gains and the losses, of course, may not have occurred in the same commodities, although to some extent they undoubtedly have.

The changes in the dollar value of German exports to various countries are shown in Table 3, with countries ranked according to the ratio of 1949 to 1936 exports. Like Table 2 this table brings out the fact that the decline of German exports was far greater in trade with the new-development countries than with the developed countries. Some exceptions apart, the list of countries receiving German exports of less than 52 per cent of their 1936 dollar value (the average ratio of 1949 to 1936 exports) reads like a roster of underdeveloped countries, and vice versa.¹¹ It will be noted, however, that exports to certain dependent territories of Western European countries, the Belgian Congo, the British colonies and mandates in Africa, and the Netherlands East Indies showed a better relation of postwar to prewar values, and so did a few Asiatic countries linked to the sterling or French franc areas. The better showing of these new-development areas may be ascribed at least in part to some sharing in ERP benefits.

Commodity-wise, German exports still consist to a large extent of coal, coke, scrap iron, and timber, these accounting for 45 per cent of

the *International Monetary Fund*, "International Financial Statistics," September, 1949. The country data shown are given on c.i.f. basis, while the ECE data represent f.o.b. values throughout. To improve comparability, c.i.f. import values have been reduced by 10 per cent.

¹⁰ Trade with Latin America and within the Iron Curtain area accounted for most of the lost German share.

¹¹ This average ratio like each individual one does not indicate the change in the volume of exports. In view of the general rise of prices since prewar it may be said that there was not a single country in 1949 that took a volume of German exports corresponding to that of 1936.

The percentages of German exports shown in the second column of Table 3 indicate the shares of the various countries in 1949; i.e., at the end of the changes listed in the first column.

the total by dollar value in the first seven months of 1949. These exports go chiefly to ERP Europe, and a conspicuous rise of earnings cannot be expected from them. Rather, they are likely to stagnate or

TABLE 4
COMPOSITION OF GERMAN (BIZONAL) EXPORTS TO VARIOUS AREAS BY COMMODITY CLASSES, IN 1936 AND IN JANUARY-JUNE, 1949

1936 Exports	ERP Europe	United States and Canada	Oceania and All Other	Non-ERP Europe	Latin America	Africa	Asia
Food and drink	1.8	5.5	1.9	1.4	1.2	2.4	1.6
Raw materials	12.7	7.0	8.4	6.9	2.2	4.8	.6
Semimanufactures	9.6	15.8	6.0	13.2	6.2	6.4	6.1
Finished industrial materials	25.8	27.7	24.8	22.2	30.2	25.4	37.8
End products	50.1	44.0	58.9	56.3	60.2	61.0	53.9
Total exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1949 Exports							
Food and drink	1.2	5.7	.1	23.8	1.1	1.7	1.4
Raw materials	24.0	1.1	46.3	4.7	.7	1.4	.6
Semimanufactures	36.2	49.7	5.0	17.9	12.0	1.7	8.9
Finished industrial materials	17.8	17.7	15.5	21.6	18.2	70.9	51.4
End products	20.8	25.8	33.1	32.0	68.0	24.3	37.7
Total exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: 1936: *Statistisches Jahrbuch fuer das Deutsche Reich, 1937*, Berlin, 1937.

1949: *Monatliche Aussenhandelsstatistik des Vereinigten Wirtschaftsgebietes, Ergaenzungsheft: "Der Aussenhandel nach Erdteilen und Laendern,"* January-June, 1949.

decline as foreign production regains its markets and German supplies decrease or are absorbed at home.¹² Export increases will therefore have to be sought chiefly in the field of finished industrial products. For the following reasons this necessity puts the spotlight on the trade with the new-development countries.

a) Traditionally the latter countries obtained a larger share of their imports from Germany in the form of finished products than did the developed Western-type areas. A similar pattern can still be found today. In 1949, the proportion of finished products in total German exports was only 36 per cent for ERP Europe, 39 per cent for the United States and Canada, and 51 per cent for Oceania; but 41 per cent for non-ERP Europe, 85 per cent for Latin America, 88 per cent for Asia, and 95 per cent for Africa. (See Table 4.)

¹² German timber exports are now declining and will become negligible in the course of 1949-50 after completion of existing contracts (JEIA, *Report for June 1949*, p. 11). Europe's coal shortage has been overcome; the rate of production in OEEC countries, particularly the Bizone and France, during January-July, 1949, exceeded OEEC plans. German coal is competitive in price and quality, and there exists a special French interest in keeping German coal exports high; but with increasingly ample supplies in Western Europe (Belgium complained of a surplus stock of one million tons in September), imports of German coal may decline in some countries.

b) The share of the new-development areas in German exports of finished products has declined to the advantage of that of the Western developed countries. The shares of ERP Europe, the United States and Canada, and Oceania in German exports have risen from 1936 to 1949, both in end products and also generally in finished industrial materials. The shares of the rest of the world have fallen except for finished industrial materials going to Africa.¹³

Before examining the problems of a further expansion of German exports, we shall look at the geographic pattern of Germany's merchandise trade balance. Chart III shows that pattern for the Reich in 1936 and for the bizonal area in the first half of 1949. In intra-European trade, the Bizone's trade balance with the United Kingdom and other Western European countries showed little change in dollar amount compared to that of the Reich before the war. Significant changes toward a more passive balance occurred in trade with the Scandinavian countries and with the new-development countries of Southern and Eastern Europe; but these changes are overshadowed by the great rise in Germany's trade deficit with the United States and with the non-European areas.

A reduction of Germany's trade deficit with the United States would appear as the most obvious measure to reduce the total deficit. But what seems statistically the most obvious need not be the most practical or the most meaningful. The same may hold true for the proposition to re-establish a surplus of Germany's net export earnings with Western Europe over her net import deficit with the non-European countries. In 1936, this surplus amounted to about 200 million dollars. In 1949, net export earnings with Western Europe (minus the deficit in the Scandinavian countries) were not quite sufficient to pay for the import deficit with Latin America, Africa, and Asia. Both of these propositions, taken up from the export side, would imply an invasion of Western domestic markets by German exports in great force. If an invasion of German goods must happen, why should it be made to conflict with a functional division of labor in the world economy? Why should it be directed "upstream," as it were, to the most developed countries instead of "downstream" to the new-development areas, which are now selling 400 million dollars more to Germany (450 million if we include the Iron Curtain countries) than they buy from her?

To fit Western Germany into a network of world trade, three conditions would have to be achieved: (1) her total current account with

¹³ A 300 per cent rise in the share of Africa in Germany's exports of finished industrial materials from 1936 to 1949 resulted from large consignments of cotton textile materials to the British Gold Coast and Nigeria during the first six months of 1949, amounting to 6.4 million dollars.

the outside world would have to be balanced, (2) her intake and outgo of dollars would have to be balanced, and (3) both balances would have to be reached at a higher level of imports. Over-all balance, dollar balance, and the enlargement of the supply basis would have to be achieved simultaneously to bring about a wholesome improvement over the present situation. The prospects for that improvement are determined largely by the prospects for German exports.

3. *Limitations on Germany's Export Expansion.* The expansion of Germany's exports in relation to her imports faces the following series of obstacles.

a) Attempts to bring about a considerable reduction in Germany's trade deficit with the United States are less likely to increase her dollar earnings than to reduce her supply basis. This attack on the problem is likely to be self-defeating.

Even after the devaluation of her currency Germany cannot expect an increase of exports to the United States that would of itself reduce the dollar deficit significantly.¹⁴ Few foreign countries can expect significantly higher dollar export earnings in the foreseeable future; and Germany's position is not a particularly favorable one in the contest for a larger slice of the American markets for luxuries, let alone raw materials. German dollar exports are not likely to increase sufficiently to offset the sharp curtailment of the United States subsidy contemplated for the coming year, from 1,232 million dollars in fiscal 1949 to less than 683 million in fiscal 1950.¹⁵

Several difficulties may prevent the planned reduction of the dollar gap. It may be found, for instance, that at present no substitutes are available for American grain on acceptable terms. Eastern and South-eastern European countries offer small prospects today for the development of reliable food supplies for export. Substitution of French wheat for American wheat has been talked about; but the appearance of large free quantities of non-dollar wheat will have to be seen before it can be believed. French overseas territories are greatly in need of additional food supplies and may have the first claim on French supplies.¹⁶ Inside Germany, exceptionally good crops may of course reduce import needs temporarily, and the high grain yields of 1949 promise to do that at the present time.

A reduction of Germany's dependence on American food supplies

¹⁴ This devaluation, incidentally, still left the mark more expensive in certain export transactions than before the establishment of the old 30 cents rate. A number of manufacturing industries then enjoyed "conversion factors" lower than the present 23.8 cents rate.

¹⁵ *Monatsberichte der Bank Deutscher Länder*, August, 1949, p. 20. The latter figure is taken from the latest OEEC allocation plan, which is likely to be scaled down by ECA.

¹⁶ French food exports to "Overseas France" have risen from 1938 to 1947 in relation both to total French food exports and to total French exports to "Overseas France."

would probably be achieved more satisfactorily through a rise of living standards in Germany, leading to a lessened reliance on cereals; but this development in turn would depend on the creation of export opportunities and is not a short-run prospect. In the short run, it is not unlikely that American surpluses of wheat will create a disposition on the part of our government to sustain exports to the occupied countries and to bolster their subsidization to that effect.

b) Attempts to gain greater export markets and export surpluses for Germany in Western European countries are likely to be defeated by the prospective curtailment of Marshall aid. Greater exports may only be attainable at the price of lesser export surpluses and greater imports of luxuries.

It is important to realize that ERP has aided Germany's exports to Western Europe and that its curtailment may affect them adversely. Owing to the desire to reduce her great trade deficit with the United States, Germany seeks dollar earnings through export surpluses to other countries and has been urged to do so by military government authorities. But her trade partners seek to prevent the calamity of dollar payments. What export surpluses Germany enjoys today in trading with individual countries either are the result of failure to achieve the balance planned in the trade agreements or are provided for under the drawing rights (offshore purchases) procedure applied under the intra-European payments plan.¹⁷ Such surpluses are likely to be put in jeopardy by an accentuation of the general European dollar shortage.

Western Europe does not look like a promising field for greatly increased German exports in times of falling United States financing. The defense of its markets against German competition will probably increase. Germany's exports to sterling area countries are likely to remain limited by her status as a dollar country; that is, as a claimant for the settlement of export surpluses in dollars. (Witness the omission of Trizonia, together with Belgium and Switzerland, from the relaxation of British import controls last fall.) And her exports to her more affluent neighbors may come to suffer from business recession in those countries. But Germany may snatch some European markets from United States exporters.

The devaluation is not likely to improve Germany's position in Western Europe. Her dependence on dollar imports is greater than her neighbors', making it possible that her costs of production will increase more than theirs.¹⁸ Higher costs of imported dollar goods will lead to

¹⁷ The Bizone's current export surplus with ERP countries, excluding dependencies (first half of 1949, annual rate) amounted to 193 million dollars. (See Chart III.) The Intra-European Payment Scheme for 1949-50 established drawing rights of 164 million on the Trizone. It should be noted that the drawing rights have also assisted Germany's exports to the dependent territories of the ERP countries.

¹⁸ In the first half of 1949, imports from the United States formed 38 per cent of the

greatly increased food subsidies and bar certain price and tax reductions that were planned or expected. On the other hand, the relatively small (20 per cent) devaluation of the Deutsche Mark may dampen the impact of the price increase of sterling area raw materials on the German cost structure. The outcome will of course depend on the effect of price and subsidy changes on wages, and on the cumulative effect of the three variables on the cost of producing goods for export. There are indications that Germany may resort to measures of economic warfare to carve out a greater slice of markets for her industrial products. The differential pricing of coal, for instance—lower for domestic than for foreign customers—may enable her steel products to undercut competition from other countries. Generally speaking, it is likely that the competition for limited markets, bound to be accentuated by a drop in United States foreign financing, will be fought out largely with the weapons of multiple prices, multiple exchange rates, or successive devaluations.

c) Attempts to create considerably larger German exports to the new-development areas of Asia, Latin America, Africa, and the Mediterranean littoral could only succeed if large credits were made available. If they were made available and if they permitted Germany to earn dollars over a number of years, the problem as a whole might be brought to a good solution.

Within limits Germany's exports to these areas might be increased *pari passu* with greater imports of certain raw materials or foodstuffs from them; but it is neither possible nor generally desirable to stretch these limits very far in the short run. Few if any of the new-development countries are likely to have additional supplies available unless the imports of other industrial countries were to decline.

A major increase of German exports to the new-development areas presupposes credit—in particular long-term credit of the type needed for broad economic development. This type of credit Germany will be unable to provide or to arrange to a sufficient extent with potentially capital-exporting neighbors; e.g., Switzerland. It can only come from the United States, directly or indirectly.

4. *Outline of a Solution.* The central problem that emerges here is one of maintaining and redirecting the stream of foreign financing coming from the United States. Curtailment of this stream would of itself worsen the prospects for the European economies to achieve a prosperous balance. Probably the greatest contribution that this country could make at the present time to an improvement of the economic climate in all parts of the world would be through an assurance of our

Bizone's total imports, 26 per cent of those of France, 18 per cent of those of Belgium-Luxembourg and Holland, 10 per cent of those of the United Kingdom (national import statistics).

intent to continue the 1948-49 level of total net foreign financing over the next five to ten years. That level, which our national economy sustained without measurable hardships in times of inflationary pressure, probably could be sustained with even less hardship in the foreseeable future.

But foreign financing from the United States should be redirected so as to enable the new-development areas to increase their over-all import surplus considerably. This might be achieved both by loans to Western

TABLE 5
IMPORTS OF MAJOR NEW-DEVELOPMENT AREAS

New-Development Areas	(1) 1948 Imports Total	(2) From Germany	(3) Germany's 1938 Share Per- centage	(4) Applied to Actual 1948 Total Imports
		(\$000,000)		(\$000,000)
Asia	6,646	16	6.8	452
Africa	4,432	18	5.1	226
Latin America	6,333	10	12.2	773
Mediterranean Europe	2,839	36	24.7	701
Total	20,250	80	10.2	2,152

ORIGIN OF IMPORTS OF MAJOR NEW-DEVELOPMENT AREAS

Exporting Countries	1948 Imports of New- Developmental Areas
	(\$000,000)
United States	6,907
United Kingdom	3,288
France	1,217
Benelux	788
Germany	80
All others	7,970
Total	20,250

Source: *Economic Survey of Europe in 1948* (Washington, D.C.: ECE, 1949), Table XVI, supplemented by *International Monetary Fund, International Financial Statistics* (September, 1949), pp. 25, 26.

Europe tied to a flow of European financing going to the developing countries and by direct financing of the latter from the United States. In 1948, the new-development areas imported the equivalent of 20,250 million dollars, exported at the rate of 18,550 million, and had an import surplus of 1,700 million.¹⁹ (See Table 5.) In a separate study I have attempted to show that in a process of active development, these areas might require an aggregate import surplus of 6 billion dollars,

¹⁹ *Economic Survey of Europe in 1948* (Washington, D.C.: ECE, 1949), Table XVI, and *International Monetary Fund, International Financial Statistics* (September, 1949), pp. 25, 26. All imports at f.o.b. values.

annually, beginning in 1952.²⁰ This larger import surplus would serve the purpose of supplying the developing countries with equipment and with materials and consumers' goods needed to sustain development with a minimum of inflation. Additional imports should be taken to a large extent from Western European industrial countries, and these should thus be enabled to earn dollar exchange through exports to new-development countries. In essence our foreign financing would thus create a broad system of multilateral trade consistent with our role as a leading creditor nation.

The additional imports of the new-development areas that would have to be financed on these assumptions amount to 4,300 million dollars. If Germany were to earn the full amount of her present trade deficit through greater exports to these areas, her share in their additional imports would be 2,000 million and that remaining for other nations would be 2,300 million. If Germany were merely to cover her present dollar deficit of 700 million dollars through greater exports to the new-development areas for dollars, the share remaining for other nations would be 3,600 million dollars.

The first alternative would solve Germany's trade balance problem entirely but leave her with a dollar surplus; the second would close her present dollar gap but possibly leave her with some imbalance in the trade with other areas. That imbalance, however, need not be great if German imports were to rise from their current annual rate of about 2 billion dollars to the target of 3 billion. New exports of 1 billion matching these import increases in addition to those earning the 700 million out of our foreign financing would cover 1,700 million out of Germany's presently foreseeable trade deficit of 2,000 million.

In 1938, German exports supplied 10 per cent of the imports of the Mediterranean area, Latin America, Asia, and Africa. If in 1948 the Bizone had had the same share in their imports, her exports would have been 2,152 million dollars. In fact they amounted to 80 million. Additional exports of 2,000 million would bring her share in the expanded imports of the new-development areas to 9 per cent. And if she supplied merely an additional 700 million of exports to them, her share would be 3 per cent of their total imports.

It is apparent that this expansion of German exports to the new-development areas would be compatible with a considerable rise of the exports of other Western countries to them. If additional dollar exchange of 4,300 million dollars were available to the new-development areas in 1952, ERP Europe could hope to cover its prospective dollar deficit at that time without direct United States aid, and there might be room left for some diversion of United States exports in the same

²⁰ "Future Foreign Financing," *Review of Economics and Statistics*, November, 1949.

direction. The general idea of this outline is to cause much less of a shift in United States exports, geographically speaking, than in European exports.

Returning to Germany's part in this process, her export drive should be focused on the new-development areas, in particular the independent countries and perhaps to a lesser extent the dependent territories of other nations. This drive should of course not imply the establishment of German colonies. It need not even be linked to specifically German development projects. Dr. Schacht, who seems to be proposing a solution of Germany's export problem along similar lines, called for "the assignment to Western Germany of mammoth projects—such as the irrigation of huge areas in Africa or the electrification of India."²¹ From a political point of view, it would be more desirable to mix Germany's participation in specific projects and in the general trade development with that of other Western countries. This task might be assigned to the OEEC organization.

There can be little doubt that Germany and other Western European countries could buy their dollars with exports of finished industrial products, tools, and standard consumers' goods, given the markets. But it is sometimes questioned whether such markets could be created in the new-development countries. Apparently the determination to create them is much greater in those countries than in the nations that command the credit facilities. The problem of the latter is to decide whether they want to see economic development proceed in a turbulent, inflationary manner and in conflict with the West or whether they want to lend some ease and a co-operative atmosphere to the process. To prevent curtailment of popular consumption in the developing countries, with the attendant demographic and political consequences, would seem to be in the interest of the Western nations. Likewise it would seem to be in their interest to prevent an overemphasis on the development of export sectors and the local parasitism that has accompanied much economic development in the past.²² Both could be checked through large injections of foreign financing paralleled by some wise external influence on development policies in the affected countries. Probably the latter cannot be exercised without the former.

The problem of creating and sustaining the outflow of foreign financ-

²¹ Newspaper interview with Dr. Schacht, published in the *New York Herald Tribune* of August 13, 1949. He showed a special interest in expanding German exports without causing a head-on collision with the other industrial nations.

²² The contribution of foreign financing to economic development cannot be discussed here satisfactorily. It is a complex question. In the deliberations at the United Nations and elsewhere, representatives of the new-development countries have pleaded for large contributions while American officials and businessmen generally have been hesitant to accept that view. On broad economic and political grounds, there may well exist a common interest of both in a large volume of foreign financing; but various problems of an institutional nature, both at home and abroad, stand in the way.

ing in the United States will not be examined here. It is primarily an institutional problem, involving the questions of how the funds are to be raised and who shall supervise their disposition, and finally a problem of political international relations. At this time neither business nor government is prepared for a sufficient amount of foreign financing beyond 1950. But one aspect needs to be put in sharp focus. The financing envisaged here must not be tied to specific American exports to the new-development countries, and its use must not be limited to their purchases from the United States. If it were, Europe's problem would remain unsolved. It will not be hard to make the financing dollar return to buy some American exports. But before it returns, it should do work abroad.

This consideration seems to be in conflict with the major types of foreign financing that we are practicing today. The tied-dollar principle pervades the bulk of our private and governmental foreign financing and it probably is impractical to abandon it altogether. But even if it is maintained, it may be bent in such a way as to reduce its bilateral trade implications; e.g., by making a tied American loan to a Western European country dependent on that country's lending to new-development countries. If the foreign financing dollar is to serve as an instrument of multilateral trade, it must be given free of ties to American exports or on the condition that it either be used for purchases outside this country, or counterbalanced by lending of the recipient to third countries. A fuller discussion of this problem is beyond the scope of this paper.

5. *Conclusions.* The approach proposed here seeks a solution of the German viability problem and of the related American subsidy problem in a world-wide arrangement of trade and finance. It is based on the belief that the problem cannot be solved in the framework of intra-European trade (European integration) or of United States-German trade. In this respect the German problem is characteristic, in the extreme, of the Western European problem.

The problem of European, and German, viability can be solved in a constructive manner through trade with the new-development areas, opened through long-range credit from the United States. Such a solution could simultaneously safeguard our exports to Western Europe and expand Western European exports to the areas of new development. A multilateral trading relationship could be built upon the superior productive capacity of the United States, the transforming capacity of the Western Europe economies, and the absorptive capacity of developing economies. Western Europe, including Germany, should find employment and dollar earnings by supplying a large part of the development goods. Thus Europe could achieve viability without

blocking United States trade, and Germany could achieve viability without taking present markets from other Western nations. The essential conditions of this pattern are a continued high level of foreign financing over and above a high level of United States imports of goods and services for a considerable number of years following the end of the Marshall Plan, and the use of part of our foreign financing for the creation of multilateral trade flows.

DISCUSSION

GERHARD COLM: As I am in full agreement with Professor Heller's very thoughtful paper, I can only try to restate in somewhat different terms some aspects of the role of fiscal and monetary policy in German economic recovery.

One of the prerequisites of economic recovery, but by no means the only one, was the restoration of a workable currency. Actually, the new money was successful in restoring incentives to work and to sell. The spectacular increase in production and delivery through legitimate channels of trade and the achievement of substantial price stability in spite of rapid decontrol of prices demonstrate the immediate success of currency reform.

From the beginning of the debate on currency reform for Germany it was recognized, however, that restoration of a new, stable money was an important, but by no means the only, contribution currency reform had to make towards German economic rehabilitation and recovery. Other objectives, as Heller emphasized, were restoring incentives to save and channeling scarce funds into capital investments of the highest economic priority. It was also necessary to assure a distribution of incomes and goods which would provide sufficient rewards to farmers and workers for productive efforts and at the same time meet the minimum demands of equity.

The occupation authorities in their deliberation of currency reform fully recognized that the execution of currency reform would of necessity have a decisive impact on the amount and distribution of saving and investment and the distribution of remaining property and income. That is why the original plans included provisions for equalization measures which were designed to effect future saving, the channeling of capital funds, and the distribution of property and income.

However, for compelling political reasons, the execution of monetary reform was divided into two parts. The narrowly defined creation of a new currency was decreed by military government, while the equalization measure and the related tax measures were left to the German authorities under a general mandate. These latter measures which had been conceived as an essential and integral part of the whole reform plan fizzled out into a minor relief measure.

Though the currency reform was successful in providing a new currency—one of the prerequisites for an increase in production and stabilization of prices—it resulted in a much less than optimum distribution of capital resources and consumer goods. These defects still need to be corrected.

One of the purposes of currency reform was to create conditions under which wartime controls, particularly with respect to consumer prices and consumer rationing, could be removed. It was not sufficiently recognized, however, that removal of wartime controls did not necessarily mean abolition of all government attempts to use fiscal, credit, and compensation measures for the purpose of influencing the stream of funds and channeling resources into the most essential use. German recovery has been impeded by the fact that policy swung from extreme centralized controls to extreme *laissez faire* and must now gradually find its way to a middle course that combines full

play of market incentives with "strategic" controls which are essential for guiding the scarce resources of a war-torn nation.

DON D. HUMPHREY: Professor Schultz believes that the West can absorb Germany's exports on terms that will leave her better off for having lost the high cost food from the Eastern breadbasket and from Eastern Europe.

Mr. Mendershausen believes that the viability of Western Germany in particular and Europe in general requires an expansion of world markets based on the perpetuation of American financial support at about the 1948 level, but with this difference: the U.S. should finance the development of new countries and permit Europe to earn the dollars there with which to buy here.

The two papers have little in common. To me the assumptions are the most interesting part of the issue in both papers.

If the U.S. were to finance both new-development countries and Europe's dollar deficit, it would unquestionably be cheaper to let Europe pay its own way with exports to the new areas rather than to support each separately. Apart from the time required for planning, I do not doubt that the last two years of Marshall aid could be more usefully employed in the Mendershausen pattern which would extend the aid initially in the development of new countries and permit the dollars to flow back indirectly via Europe.

From the present paper, one can only remark that the German 1 billion dollar deficit seems to wag the American 6 billion dollar gift dog. Even if we were to accept Mendershausen's framework, why is a 6 billion dollar new market necessary to enable Europe to cover a 2-3 billion deficit? If, in the new markets, the U.S. were to accept discrimination against our own exports in favor of Europe, then Europe would be able to earn sufficient dollars to cover its deficit with 2-3 billion instead of 6 billion dollars of new markets.

If the objective is to permit Europe to earn dollars, the sooner we accept discrimination against our exports, the less financial aid that will be required. Sufficient discrimination would eliminate the need for aid. Mr. Mendershausen, however, has taken the opposite course and suggested a program almost big enough to eliminate the need for discrimination. One-half to two-thirds of Mr. Mendershausen's 6 billion dollar program represents the cost of multilateralism.

But what manner of mad world is this in which multilateralism augments and discrimination diminishes the need for subsidy?

The rise of mass democracy has produced the welfare state which is dedicated to the protection of living standards instead of to the protection of property.

The distinction between essentials and fripperies is a natural corollary of the social character of the welfare state; the fact that the distinction is drawn at different points reflects the inequality between nations. Imports of food and coal have a different value from imports of perfume and champagne. Domestic production, on the other hand, is not convertible to essentials because of fixed investment. There is an understandable reluctance to plow vineyards, citrus groves, and tobacco farms into wheat fields. The bilateralism

of today is the sumptuary legislation of day before yesterday reinforced with the doctrine of equality.

The crisis of our time is that the nations of Europe lack the means to fulfill the social demands that are placed upon them. Europe's ability to pay for imports is dependent on the outside world's willingness to buy. It is for this reason that the towering strength of America looms so large in Europe's balance of payments.

The case of Germany is critical: prewar levels of intra-European and world trade have been restored without Germany. The Ruhr and other controls limit her exports in fields where she probably has the greatest comparative advantage. But even before the war, Germany's essential imports were contingent upon a tenuous pattern of trade. Germany habitually sold more on the Continent than she bought, while Britain bought more from the Continent than she sold, so that Germany's access to overseas markets depended on the liquidity provided by Britain. Britain can no longer afford to import the nonessentials which accounted for her deficit with the Continent and which furnished Germany access to raw materials from overseas. The old pattern of trade has been destroyed beyond repair.

It is valuable to have Professor Schultz's paper and I approve his analysis within the framework that he has assumed. But he has assumed that because the U.S., for example, has food for export, it will get to German mouths. In the absence of American aid somewhere in the world, this assumption seems to me inadmissible, for it can be realized only if the U.S. will play the role once played by Britain and import more than it exports from some area with which Germany can maintain a favorable balance of trade. It is out of the question for Germany to sell enough in the U.S. to pay for her food imports and I doubt that there is any nation which will pay dollars for any substantial volume of German goods once American aid is stopped. Germany's present limited market is highly artificial in that it depends on the dollar aid that we are furnishing to the buyers of German exports. The nations of Europe planned to balance their accounts after 1952 by getting dollars from each other. In a multilateral Europe, Germany, I think, would win dollars, which is one reason why I believe that Europe will not permit a multilateral struggle for dollars.

If the U.S. stops the Marshall Plan type of aid without the Mendershausen equivalent, the most probable course of events is that the U.S. will end up giving food to Germany both because we do not like hunger in the world and because we do like to produce food.

In an effort to bring the mutually exclusive positions of Professor Schultz and Mr. Mendershausen together, I might suggest for a moment an alternative formula. Instead of the 6 billion dollars of new markets suggested by Mendershausen, let the U.S. finance new markets in whatever magnitude required to enable Germany to buy the surplus food accumulated by the American government, provided that Germany adopts Professor Schultz's policies. If we do not permit discrimination against ourselves, my guess is that within a

few year's time this formula might well require an aid program larger than Mendershausen's.

The old international order was made possible by the expansion of world trade under British hegemony. The strongest power and the greatest trader maintained an open market for an expanding world, and immigration made the system bearable to those for whom it worked least satisfactorily. But in the last analysis, balance and order in international affairs were achieved, if need be, at the cost of unemployment and starvation.

It was the failure of the market to limit the growth of inequality which led to its undoing. The phenomenal increase in wealth which the system created was eclipsed by the growth of inequality. Man's sense of well-being is measured by comparison with his contemporaries rather than his ancestors. The result of the extension of democracy from politics to economics is the socialism of the welfare state. But equality stops at the frontier with the inevitable result that socialism within the nation has produced nationalism between nations. This is a period of social nationalism. There is a lingering tendency to identify socialism with internationalism. This is an atavistic remnant from the period of liberalism when the "night watchman state" existed for the protection of property and the workers had no fatherland. But now the workers have gained a fatherland and have much to lose—in the case of the richer nations. The nationalism of the "fatherland" state is the product of its social character and of the inequality between nations.

Mr. Mendershausen is correct in looking for a new basis for world order. For this we must give him full credit. But has he found anything? "Active trade balance," "creditor interest," "foreign financing"—these are the terms by which he has characterized his proposal. They all seem to be a euphemism for gifts.

When he speaks of the "creditor interest" of the U.S., the "viability interest" of Europe, and the "development interest" of new countries and concludes that "the world is sufficiently united to make it impossible for one of the three major parts to find a satisfying balance without the other two, or for two without the third," I am afraid that sales talk has been confused with analysis. To me, the monumental failure lies in the identification of American gifts with a new basis of international order. And I think, also, that it is a mistake to be impressed by the fact that the marginal costs to us may be low.

What is needed is the development of criteria to fit the unique position of the U.S. in a world of national welfare states. Mr. Mendershausen has faced in the right direction. The world does require expanding markets. But deficits are no criteria and therein lies the ultimate failure of the Marshall Plan. Mr. Mendershausen has suggested an improvement in the technique of the Marshall Plan but he has not given us a principle and it is principles that are needed.

The foundation of the old order has been sapped by dual demons: the socialization of the nation and the nationalization of the masses. We are living in international anarchy only thinly disguised by American aid. Gifts

can, perhaps, buy time, but gifts will not win friends, and they most certainly cannot provide a basis for the belief and morality that are an indispensable requisite for international order.

The doctrine of multilateralism and the automatic balance was a salutary myth which served the world well under British hegemony. But the social and national character of the welfare state is the product of massive forces that are as wide as the world and as deep as the extension of effective democracy to the masses.

"We must not think we have an easy task when we have a difficult task, or that we are living in a natural state when we are really living in an artificial one. Money will not manage itself, and Lombard Street has a great deal of money to manage." Thus W. Bagehot concluded the first chapter of his famous book three-quarters of a century ago.

Today the pound sterling can no longer support the great burden of world trade and power and we are quite utopian, I am afraid, if we expect Pennsylvania Avenue to manage the dollar in the twentieth century on the rules which served Lombard Street so well in the nineteenth.

The attitude expressed by Bagehot in the conclusion of *Lombard Street* expresses my own sentiment today:

I know it will be said that . . . I have pointed out a deep malady, and only suggested a superficial remedy. . . . I can only reply that I propose to retain this system because I am quite sure that it is of no manner of use proposing to alter it. . . . We must therefore, I think, have recourse to feeble and humble palliatives . . . good sense, good judgment, and good care . . . may be enough. But I have written in vain if I require to say now that the problem is delicate, that the solution is varying and difficult, and that the result is inestimable to us all.

PHILIP M. RAUP: In 1948 Germany imported goods totaling 1.4 billion dollars in value. Approximately two-thirds of this total was spent for food, feeds, seeds, and fertilizers. Even this large expenditure, plus the good harvests of 1948, succeeded only in raising the calorie intake to about 88 per cent of the prewar level, and the composition of this diet is much worse than prewar. For 1949-50, food and agricultural imports are estimated at roughly 1 billion dollars,¹ a figure that appears likely to be 50 per cent or better of total 1949-50 imports.

The import of food and agricultural products plays a dominant role in present German trade. It is likely that this will continue to be true for the immediate future. I submit that in these circumstances Professor Schultz has the tail wagging the dog. Germany's domestic level of food production and her resultant need for food imports will dominate her foreign trade policies and greatly influence her industrial output, certainly throughout the life of the Marshall Plan.

It is unquestionably true, as Professor Schultz has pointed out, that German

¹ *Ernährungswirtschaft und Agrarpolitik*, speech by Minister Dr. W. Niklas before the Food, Agriculture and Forestry Committee of the Federal Parliament, published by the Federal Ministry for Food, Agriculture and Forests, Bonn, October, 1949.

agriculture contributes only a small share to the German national income. I am not persuaded, however, that the size of this share measures the strategic importance of agriculture and food problems to present-day Germany. Only twice in the past twenty years has American agriculture contributed as much as 10 per cent to our national income, and it has in general averaged about the same as the proportionate share contributed by agriculture in Germany.² The size of the share is certainly no sufficient proof of the critical importance of agriculture's contribution to the income flow.

It is quite clear that one of the main tasks of Western Germany is the production and sale of exportable goods in quantities sufficient to cover its minimum food and feed import requirements. Coupled with this is the necessity of increasing domestic food production, paying due regard to the costs that this will involve. The principal economic issue involved is: what are the factors that will determine the optimum allocation of resources in Germany between domestic agriculture on the one hand and the industrial and non-agricultural segment of the economy on the other? This is the problem that Professor Schultz has chosen to discuss within the framework of the "terms of trade."

Stressing the assumptions that he has laid down, I am in agreement with Professor Schultz that there is no evident and convincing reason to believe that the terms of trade will move against Germany as they settle to more representative levels. It is the assumptions, however, that must be explored.

"Essentially full employment" in the Western trading world has been explicitly mentioned. This assumption must also cover Western Germany, where today 9 per cent of the registered labor force is unemployed, and there are many more whose underemployment is camouflaged in agriculture, the personal service trades, and other fields. Until this unemployment figure is reduced, there can be little talk about an allocation of resources in Germany between industry and agriculture that is significantly influenced by the terms of trade. Unless industrial and commercial Germany can absorb these unemployed, there is certain to be a movement of labor and other productive resources to agriculture beyond that which would be justified in terms of the relationship between world food prices and the earning capacity of German exports.

Today, sugar, some fats, and most oils can be laid down in Germany at prices lower than German costs of production. Economic logic would dictate, and Professor Schultz concludes, that sugar beet acreages should fall, given a level of productivity per industrial worker that approaches or exceeds pre-war levels. The terms of trade have already moved in Germany's favor as regards sugar, yet it is unlikely in the extreme that this will be permitted to have its expected effect on German farmers. It can be predicted almost with certainty that German policy will continue to protect sugar beet growers from the impact of world prices. Should the Soviet zone again be united with

² *National Income Supplement to Survey of Current Business* (U.S. Dept. of Commerce, July, 1947), and *Statistisches Jahrbuch*, 1939-40.

Western Germany this certainty would increase, for it was there that some of Germany's most intensive sugar beet areas were located prior to 1945.

This unfolds one of the key problems that confounds any discussion of the effect of world price movements and the terms of trade on the German economy. This generation of Germans is profoundly distrustful of any economic policy that is reliant on world price movements. Three times in one lifetime the German price system has come apart: in the inflation of 1923, in the world-wide depression of the early thirties, and in the postwar "suppressed inflation" of 1945-48. For the urban and industrial population, which included over 80 per cent of the total prewar population, all three of these debacles were associated with food scarcity, and the most severe was the most recent. Regardless of economic logic, two simple lessons are deeply engraved on the German mind: avoid entanglement in an unpredictable world price system; avoid reliance on imports for food. Regardless of the status of world food supplies, regardless of the movements of the terms of trade, the really significant question is: will the makers of German policy behave as economic men with regard to their food supply? I doubt very much that they will.

The alternative that faces Germany is to place the maximum possible reliance on her own food producing resources. What are those resources, and how highly can they be developed?

A surprising and little appreciated fact is that Western Germany today has reached or exceeded her prewar yields per acre of almost all major food crops. The most important exception is sugar beets, and even here the 1948 yield reached 90 per cent of prewar. In spite of a slowness on the part of planted hectares to return to their prewar levels, the total harvest of bread grains in 1949 was 6 per cent above the high 1935-38 average; the 1949 yield per acre was nearly 25 per cent above the prewar figure. The 1949 feed grain harvest fell about 8 per cent below the 1935-38 average, but in spite of this almost exactly the same total tonnage of cereal grains was produced in 1949, in the bizonal area, as in 1935-38, and from an area that was 17 per cent smaller. In addition, the potato crops in both 1948 and 1949 were substantially above the prewar average.³

These are remarkable results. The per-acre yields of field crops in Germany today, four years after the end of the war, have in general reached a level of recovery that was not reached until eight or ten years after the end of the first World War. These high yields are not accidental. Western Germany has benefited from good weather, but the high yields cited above are firmly based on the fact that higher applications of fertilizers are being made today than ever before. In 1948-49, in the bizonal area, 9 per cent more nitrogen, 11 per cent more phosphate, and 14 per cent more potash were being applied per hectare than ever before. The reasons underlying this recovery and its implications are too involved to discuss here in detail.⁴ The principal lesson

³ These figures have been taken from the *Statistischer Monatsbericht* (mimeo.), Federal Ministry of Food, Agriculture and Forests, Frankfurt, October, 1949 (for 1948 and 1949), and from *Food and Agriculture Statistics, 1935-1947*. Bipartite Control Office, Frankfurt, March, 1948. They refer only to the Bizone.

⁴ See in this connection Philip M. Raup, "Postwar Recovery of Western German Agri-

is clear: Western Germany is today engaged in intensifying her agriculture and there is every indication that the process is just beginning.

Professor Schultz has depreciated the gains that could be achieved from a modernization of agriculture in Western Germany, and he does not feel that they could be achieved quickly. I do not share his pessimism. I strongly suspect that technological advances will come more quickly to German agriculture than a faith in free markets and in foreign trade will come to the German statesman.

The possibilities for technological advance are impressive. Western Germany today has a population density exceeding Denmark's and only slightly behind Holland and Belgium. These three Northwestern European nations taken together provide an interesting contrast to their German neighbor. In Denmark, Holland, and Belgium, in 1949, yields of wheat per acre were 34 per cent above the high Western German yields. Rye yields were 15 per cent above Germany's and potato yields 17 per cent higher. Had Western Germany enjoyed in 1949 the yields of wheat and rye actually achieved in Denmark, Holland, and Belgium, she would have produced 1.4 million metric tons more of bread grains, or an amount equivalent to 44 per cent of the entire tonnage of bread grains imported into Germany in 1948-49.

If Western Germany could raise her yields to the level of Denmark, Holland, and Belgium and if planted acreages were returned to their pre-war levels, the increased production that would result would have equaled 25 per cent of the total dollar value of Germany's imports in 1948-49. It would have tremendously reduced the need for bread grain imports. The knowledge that this goal is not outside the realm of possibility will be a temptation to Germany to attempt to achieve it.

The shift from horsepower to tractors would have enormous consequences for Germany's food production potential. There are today actually 5 per cent more horses in the three Western zones than there were in 1935-38. A reduction of only one-fourth in this number of horses would free an estimated one million acres of agricultural land for other food and feed output. This shift is wholly within the realm of the possible. No other nation in Western Europe has as great an industrial capacity for mechanizing its agriculture as does Germany. Substantial progress in this direction had been made prior to and during the war, and its resumption would involve no new techniques or industrial capacities. The added power that tractors would bring would also greatly improve tillage methods, which today are primitive in the extreme.

Great progress could also be achieved in the production of livestock products. The prewar milk yield per cow in Western Germany was only about 75 per cent of that of Denmark, Holland, and Belgium, and the fat content was substantially lower.

It is considerations of this nature that make me extremely reluctant to under-

culture," *Journal of Farm Economics*, February, 1950. It must be noted that 1948 and 1949 were favorable crop years. There were also years of favorable weather in the ten years after the first World War. The point of difference is that, due to adequate fertilization and other factors, Western German agriculture was able to exploit the admittedly beneficent weather of 1948-49 to good advantage.

estimate the possibilities of technological progress in German agriculture. I am made even more reluctant by the knowledge that, in spite of a population upsurge that increased her population density from 220 persons per square mile in 1882 to 380 in 1939, Germany nevertheless produced from her own fields more calories per capita in 1939 than she had in 1882.⁶ At any of the major turning points in Germany's history in the past seventy-five years, the pessimistic observer would have concluded, from a look at Germany's past and at her existing population, that domestic food production per capita would inevitably decline. Exactly the reverse has occurred. Do not underestimate the possibilities of technological progress in German agriculture.

How far this progress should be encouraged to go remains the unanswered question. Many of the improvements that hold great promise can be introduced without greatly distorting the flow of resources between the agricultural and nonagricultural segments of the economy. High quality seeds, more nitrogen and phosphate fertilizer, the control of bovine tuberculosis, the promotion of artificial insemination and of advances in livestock breeding—all these can be accomplished with no great outlay of capital and labor. Substituting the tractor for the horse and paying for fuel imports are of a different order of magnitude. Here, however, I suspect that the profitable limit of resource investment in German agriculture may be higher than we think.

In summary, it seems to me that it is not helpful to consider whether or not there will be any general flow of resources into or out of German agriculture. The significant question is what kind of resources will flow into German agriculture. It is today a hoarder of labor, though less so than a year ago. There is a tremendous possibility for a flow of capital resources into German agriculture accompanied by no increase, or better, a reduction, in its labor force. Whether or not this actually takes place will, I suspect, be influenced primarily by other, less tangible, factors than the movements of the terms of trade.

HEINZ SAUERMANN: To begin with let me point out that the problems which have been discussed here have also been of vital concern to the German economists. While there seems to be general agreement on the major aims of the German economic policy, we will find that the conclusions of this panel differ in some ways from those of many German economists. This may be due to a differing evaluation of various factors and perhaps also to more fundamental differences in attitude. It may thus be of interest to try to sketch the German point of view.

The three excellent papers presented all focus their attention upon a full employment equilibrium, either as a premise or as a goal. German economists, while also aiming at this equilibrium, tend to be more concerned with immediate, short-run measures by which the present precarious and artificial economic balance can be maintained.

⁶This statement is supported by extensive calculations based primarily on Walter Brodbeck, *Deutsche Getreidestatistik seit 1878* (Berlin: Verlag Theodor Weicher, 1939); on *Erntestatistik 1935*, *Statistik des Deutschen Reichs*, Vol. 489, *Statistisches Reichsamt* (Berlin, 1936); and on the *Statistisches Jahrbuch*, 1939-40.

At present Western Germany receives foreign aid of about 1 billion dollars per year; subsidizes the agricultural imports by about DM 900 million per year, and is attempting to keep refugees and other destitute persons alive through an embryonic capital levy which has yielded about DM 2 billion.

Moreover, it should be emphasized that progress toward recovery since the currency reform must not be overestimated. Statistics presently available are highly unreliable; and the use of 1936 figures as a basis for production indices is deceptive if one remembers that the population of Western Germany has been swollen by nine and a half million refugees.

This situation means that any economic decision is likely to have wide significance and repercussions in other fields and is thus tied to noneconomic considerations; it means that such decisions cannot be made solely by using the prescriptions of classical economics.

Under the circumstances prevailing in Western Germany today, we are inclined to attach considerable importance to agriculture. It is true the share of agriculture in total national production is small. In terms of 1948, the agricultural share amounted to 8.8 per cent. But this result is due to the German agricultural price policy. In terms of 1936 prices, the share of agriculture in Western Germany amounts to about 10 per cent. In 1939, the agricultural share of the national income amounted to 12 per cent. If we assume that a large number of the refugees may be staying in the agricultural areas of Western Germany, so that the percentage of those living off the land has increased, we may assume that no downward trend has occurred.

Secondly, agricultural products play a key role in the price structure of the German economy today. Forty per cent of Germany's food requirement must be imported and at prices which are generally higher than the domestic ones, so that a subsidy of about DM 900 million is used annually to bring the price of the imported foodstuffs down to the internal German price level.

It must be emphasized that industry and not agriculture benefits from these subsidies. Only by keeping food prices at this artificially low level has it been possible to avoid increases in the wage level. The farmers and the workers have ultimately borne the burden, enabling German industry to develop and to pile up large profits.

Consequently, the very great inequality in the distribution of income is one obstacle that must be overcome. At present the low-income groups constituting nine-tenths of the population are unable to afford such simple industrial products as clothing, etc. This means a lack of effective domestic demand for Germany's industrial output. This lack of a widely diffused demand is not offset by the spending of the small group with very high incomes, since such spending is chiefly for luxury goods. Thus the present situation contains the seeds of instability rather than of a high-level equilibrium.

To achieve a more equal distribution of income, it is necessary to let the price of agricultural products find its own level. My own estimate is that an uncontrolled price for foodstuffs would raise the costs of living by approximately 8 per cent. If the resulting wage increase is absorbed by industry, thus reducing its excessive profits, no wage-price spiral will result. For

various reasons, including the international competitive situation, I think the German industry will have to absorb this increase rather than to pass it on.

The resulting accession to the farmers' and perhaps the workers' purchasing power may further reduce unemployment, thus tending to that full employment equilibrium presupposed in the papers presented. The lowering of the excessively high profits will probably not diminish the volume of investment. The DM 900 million which have been used for subsidies up to now will be available for investment, for they will no longer be needed for subsidies if foodstuffs are allowed to find their own price level. I think the adjustments of agricultural prices and wages are the most appropriate way to bring about an approximation to full employment equilibrium.

Finally I want to emphasize that German economic policy should be directed to the development of exports. However, the at present still prevailing opportunities to make very high profits in the domestic market has led German industry to neglect the export trade. The incentives so far set up to expand exports have been without notable success. As excessive profits in the domestic markets are eliminated, the opportunities in export will become more and more attractive, thus furnishing the most powerful stimulus to increase German exports.

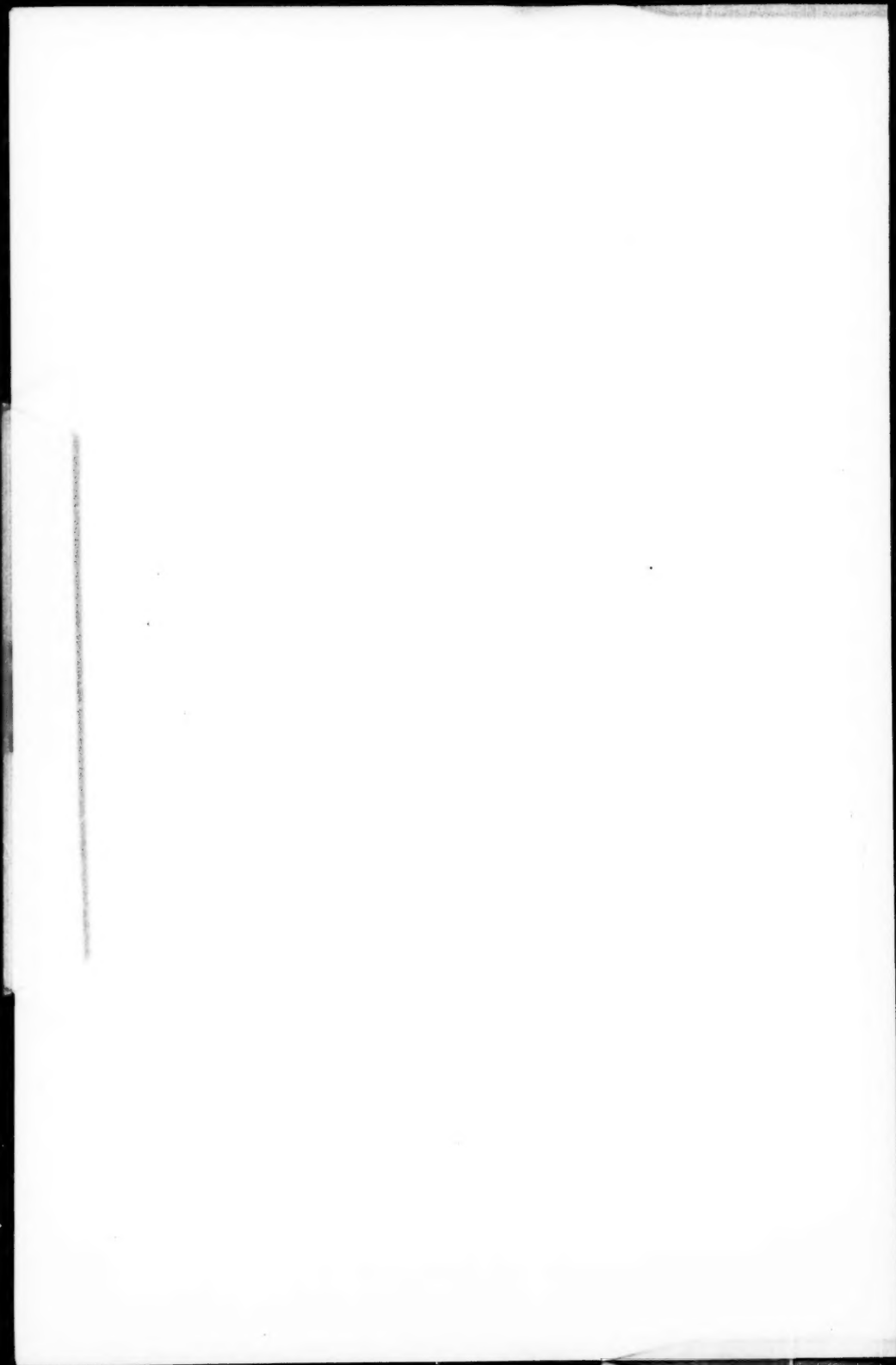
In summary, the problem of achieving a domestic economic equilibrium is a crucial one. As I tried to point out, adapting the prices of agricultural products to the external price level and consequently raising wages will bring about a fairer distribution of income and an approximately full employment equilibrium.

The means of obtaining a sound long-term investment policy and an international payments balance have been lucidly expounded. I intended to supplement these very important and far-reaching proposals by approaching the problems involved from a more immediate viewpoint.

AMERICAN ECONOMIC ASSOCIATION

PROCEEDINGS OF THE SIXTY-SECOND
ANNUAL MEETING

NEW YORK, NEW YORK
DECEMBER 27-30, 1949



PROCEEDINGS OF THE AMERICAN ECONOMIC ASSOCIATION

ANNUAL BUSINESS MEETING, DECEMBER 29, 1949
HOTEL COMMODORE, NEW YORK, NEW YORK

The business session of the Sixty-second Annual Meeting of the American Economic Association was held in Hotel Commodore, New York City, at 5:00 P.M., December 29, 1949. President Howard S. Ellis presided. The minutes of last year's business meeting, having been published in the *Proceedings*, were not read, nor were the minutes of the Executive Committee meetings. These appear with the Secretary's Report in the *Proceedings*.

President Ellis, after a few words of welcome, presented a brief review of the Association activities of the past year, commenting particularly upon matters of program building, publications, and the work of committees. Of primary interest are the accomplishments of the Committees on Republications, Teaching, Research, Public Issues, Honors and Awards, International Cooperation with Foreign Scholars, and Aid to Foreign Scholars. Reports of these committees are published in the *Proceedings*.

Reports of the Secretary and Treasurer were then summarized by Professor J. W. Bell, who called attention briefly to the continued growth of the Association, the large and active participation of its members in assuring the success of its publications and annual programs, and to the sound financial condition of its affairs.

The maintenance and development of cordial co-operative relations between our Association and those affiliated in the social science group are a major consideration of organization policy. Everything possible is being done to stimulate and encourage the untrammelled development of the more specialized societies whose overlapping membership and common interests make their problems ours and ours theirs. It would be unwise to attempt to serve the growing and expanding specialized interests represented within the Association by keeping everything under one umbrella and publishing all contributions in the *Review* and the *Proceedings*. When a group of our members becomes sufficiently active and unified to press for a substantial section of the annual program year after year, the time has probably come when a separate organization and publication are called for. This process of segmentation or division is recognized, and although we have not adopted the plan of organizing sections, as exist in the American Association for the Advancement of Science and the British association, we have co-operated and assisted in the establishment of new societies, and we hope and trust that our relationships with them will not grow less strong and intimate because of their separate entity. With respect to the publication of the papers presented at the annual meetings, due regard is given to joint sessions in the *Proceedings*, and when other publication outlets are used, cross references are made in all cases in order to tie up papers on related subjects. With respect to annual meetings, the plan announced last year is being followed; i.e., over-all joint meetings every third year, with independent arrangements made by individual associations in the intervening years. In keeping with this plan, the present (1949) meeting is of the over-all

type, hotel reservations having been made in the name of the Allied Social Science Associations. For 1950, the American Economic Association is scheduled to meet at the Palmer House in Chicago, other associations making their own decisions as to when and where to meet. In 1951 we go to the Statler Hotel in Boston on the same independent basis and in 1952 a joint meeting is again planned, this time in Chicago. Thereafter this general pattern will be repeated.

The publications of the Association consist of the quarterly journal, the *American Economic Review*, the *Papers and Proceedings*, and occasional reports and monographs which are issued as supplements to the *Review*. We also sponsor the publication of a series of readings on selected topics which consist of articles reprinted from ours and other journals. In addition, a volume, *A Survey of Contemporary Economics*, published in 1948, may become the precursor of subsequent reviews of economics. The Research Committee may recommend the inauguration of a new series of translations of foreign classics. It is gratifying to report that all of our publications are doing well and publishers have expressed interest in whatever we may project.

The finances of the Association are in a satisfactory condition. After operating in the red for two years, we are again living within our current income. We have held expenditures down and the rapid growth of membership and augmented income from other sources have enabled us to keep up with increased printing and other costs. This conditions is the more favorable since the current reports do not reflect the \$6.00 rate for dues and subscriptions going into effect for the year 1950. Our investment portfolio also shows a favorable condition; it reflects the improvement of the market.

Reports of the officers, of various committee activities, and of our representatives to the Councils and the National Bureau of Economic Research are printed in the *Proceedings* as follows: Reports of the Secretary (page 588); Treasurer (page 603); Finance Committee (page 607); Auditor (page 609); and Managing Editor (page 614). Reports of standing and special committees: Republications, B. F. Haley, Chairman (page 618); Teaching of Economics and Training of Economists, Horace Taylor, Chairman (page 619); Aid to Foreign Scholars, Mabel Newcomer, Chairman (page 624); and International Co-operation, the I.E.A., Gottfried Haberler, Chairman (page 626). Reports of Representatives: American Council of Learned Societies (page 629), Social Science Research Council (page 631), National Bureau of Economic Research (page 634).

President Ellis called upon the members present to stand in silent tribute to those of our members who have passed away during the year. Professor R. A. Lester then read a brief memorial to Frank D. Graham, which was ordered printed as part of these minutes. It is found below.

Two years ago there was established, by vote of the Association, two awards to be known as the Francis A. Walker and the John Bates Clark medals, the former to be awarded every five years and the latter every two years. After a diligent screening of a large number of meritorious candidates by the Committee on Honors and Awards and after careful consideration by the Execu-

tive Committee, the John Bates Clark medal was awarded to Kenneth Ewart Boulding. President Ellis read the citation—"To that American economist under the age of forty who is adjudged to have made a significant contribution to economic thought and knowledge"—and, with a few felicitous remarks on the achievements of Professor Boulding and his contribution to economics, presented him with the medal. A facsimile of the medal was printed in the *Papers and Proceedings* for May, 1948, pages xii and xiii.

The report of the Election Committee and the certification of the election of new officers for the year 1950 were presented by the Secretary as follows:

In accordance with the bylaws on election procedure, I hereby certify the results of the recent balloting and present the reports of the Nominating Committee and the Committee on Elections.

The Nominating Committee, consisting of Simeon E. Leland, Northwestern University, Chairman, James K. Hall, University of Washington, Margaret G. Reid, University of Illinois, Lloyd G. Reynolds, Yale University, Edward C. Simmons, Duke University, and Wolfgang F. Stolper, University of Michigan, presented to the Secretary the list of nominees for the respective offices:

	For President	
	Frank Hyneman Knight	
For Vice-Presidents		For Executive Committee
Edward Sagendorph Mason		Vincent Wheeler Bladen
Arynness Joy Wickens		Lester Vernon Chandler
Clair Wilcox		Robert Aaron Gordon
Edwin Emil Witte		William Hord Nicholls

The Committee on Elections (Lloyd A. Metzler, University of Chicago, Chairman, Frank W. Fetter, Northwestern University, and James Washington Bell) prepared biographical sketches of the candidates and ballots were distributed early in November. The canvass of ballots was made on December 19, 1949, and the results were filed with the Secretary.

From the report of the Committee on Elections, I have the following information:

Number of envelopes without names for identification	8
Number received too late	36
Number of defective ballots	—
Number of legal ballots	2,461
Number of returns from the mail ballot	2,505

On the basis of the canvass of the votes cast, I certify that the following persons have been duly elected to the respective offices:

- President (for a term of one year)
- Frank Hyneman Knight
- Vice-Presidents (for a term of one year)
- Edward Sagendorph Mason
- Clair Wilcox
- Members of the Executive Committee (for a term of three years)
- Lester Vernon Chandler
- Robert Aaron Gordon

Upon the announcement of the results of the election, the President-elect, Frank H. Knight, was introduced by the retiring President, Howard S. Ellis. President Knight responded by graciously acknowledging the honor of having been elected to the presidency of the Association and spoke briefly on the subject of what the Association means to us and how the members could be of help to him in the discharge of his duties and responsibilities.

The following report of the Committee on Resolutions was read by Professor C. W. Anrod:

WHEREAS, The members of the American Economic Association, meeting in the Sixty-second Annual Meeting, December 27-30, 1949, in New York, New York, desire to record their gratitude; therefore be it

Resolved, That the Association extends its sincere thanks to President Howard S. Ellis, who carried the full responsibility for formulating the excellent program, to those who assisted him in the development of segments of the program, and to those who participated therein; and be it further

Resolved, That the Association extends its thanks to Professor James Washington Bell, efficient Secretary of the Association, and to his able and hard working staff; and be it further

Resolved, That the Association extends its thanks to the officers and members of the several associations concurrently meeting for the opportunity to share their interesting programs; and be it further

Resolved, That the Association extends its thanks to Mr. Martin R. Gainsbrugh, of the National Industrial Conference Board, Chairman, and the very conscientious and capable members of his Committee on Local Arrangements, to the officials and staff of the New York Convention and Visitors Bureau, as well as to the management and employees of the Hotel Commodore for the excellent facilities and services provided for the members of the Association.

Charles W. Anrod, *Chairman*
Herbert E. Dougall
Donald M. Halley
Philip Taft

After the reading of this resolution the meeting was adjourned at 6:15 P.M.

JAMES WASHINGTON BELL, *Secretary*

IN MEMORIAM

Frank Dunstone Graham
1890-1949

On September 24, 1949, Frank D. Graham, Walker Professor of International Finance at Princeton University, died from a fall at Palmer Stadium at the close of the Princeton-Lafayette football game. During the last two decades of his life, Professor Graham was concerned with some of the most difficult problems of our times—unemployment, monetary stability, and international peace and prosperity. To these formidable tasks he brought an acute intellect, a deep love of truth, great courage in his convictions, and a warm concern for human welfare.

Born of American parents in Halifax, Nova Scotia, on January 1, 1890, Professor Graham received an A.B. in 1913 and an LL.B. in 1915 from Dalhousie University, and then an A.M. in 1917 and a Ph.D. in 1920 from Harvard University. Encouraged at Harvard by Professor Frank A. Taussig to test by application to historical data one of Taussig's theories, Graham wrote his doctor's thesis on *International Trade under Depreciated Paper: United States, 1862-79* (Harvard, 1920, unpublished but condensed version in *Quarterly Journal of Economics*, XXXVI, pp. 220-273). Even in this early study, he was too independent and original a thinker to be a mere disciple, though he remained a lifetime friend of Taussig.

Frank Graham's great critical and analytical powers developed early. Coming to Princeton as an assistant professor in 1921, he was by the late twenties one of the outstanding graduate teachers on the Princeton campus. Characterizing himself as "a natural skeptic," he scrutinized and uncovered weaknesses in orthodox monetary and international trade theory. His ability to expose popular error by sharp and penetrating analysis revealed itself in publications during the twenties and thirties on such subjects as reparations, the tariff, silver, and monetary standards (*vide* "Germany's Capacity to Pay and the Reparation Plan," *American Economic Review*, XV, pp. 209-227; *Protective Tariffs* [Harper, 1934]; "The Fall in the Value of Silver and Its Consequences," *Journal of Political Economy*, XXXIX, pp. 425-470; "The Silver Question Once More," in *Explorations in Economics, in Honor of F. W. Taussig* [McGraw-Hill, 1936], pp. 55-67; and, with C. R. Whittlesey, *Golden Avalanche* [Princeton University Press, 1939]). As the world continued in the forties to be troubled by problems of monetary policy and of balance in international accounts, Graham continued to insist on clear thinking and unequivocal choice between incompatible policies (*vid* *Fundamentals of International Monetary Policy*, 1943, and *The Cause and Cure of "Dollar Shortage,"* 1949, Essays No. 2 and 10 in the "Essay Series" of the International Finance Section of Princeton University).

Never merely a critic, Frank Graham strove to extend the frontiers of knowledge in his chosen fields of study. His volume on *Exchange, Prices, and*

Production in Hyper-Inflation, 1920-1923, is probably the outstanding work on that subject and contains as well some significant contributions to the theory of money and foreign exchange. His last book, *The Theory of International Values* (1948), is a monument to his long and earnest study of international trade theory. Typical of Graham both in method of analysis and literary style, this volume represents his most significant contribution to theoretical economics.

In Graham's opinion, trained economists should exert influence in matters of public policy. The widespread unemployment of the thirties he considered a challenge to economists to apply their learning to prevent an enormous and needless waste. During the summer of 1932, which divided the two years that he served as a visiting professor at the Institut Universitaire Hautes Études Internationales in Geneva (Switzerland), he toured this country at his own expense to interest economists, businessmen, public officials, and others in his plan for an exchange economy composed of the unemployed resources. Set forth in *The Abolition of Unemployment* (Princeton University Press, 1932), this so-called "Graham Plan" received considerable notice and some practical application in various forms. Characteristically Graham continued to modify and improve it. The last version of his unemployment program appeared in *Planning and Paying for Full Employment* (Princeton University Press, 1946), which he edited with A. P. Lerner.

An old-fashioned liberal, Graham sought improvements in the economic system which would overcome depressions without an expansion in governmental intervention. Not one to accept passively the results of blind economic force, he favored rules, automatic devices, and the operation of competition. Such proclivities made him a very active and persuasive participant in the meetings of the Mont Pèlerin Society. Graham's intellectual honesty and insistence on truth regardless of political currents made him seem to some a radical and to others a conservative. He attacked the wage theories of labor leaders as well as high tariffs and infringements of civil liberties; he favored ample possibilities for profitable enterprise as well as high inheritance taxes and 100-per-cent and commodity-reserve money. During World War II, Congressmen were astonished when he appeared at hearings to advocate higher taxes on persons like himself in order to avoid inflation. His broad economic program is most fully developed in *Social Goals and Economic Institutions* (Princeton University Press, 1943), which is one of the important works on improving the functioning of the capitalist system, part of the general theme of this year's meetings.

Graham objected to the notion that economists should maintain a scientific detachment from the world of affairs and withhold their judgments or advice until the last scrap of data had been uncovered and neatly arranged. It was his motion at the Association's business meeting in 1943 (*vide Papers and Proceedings of the 56th Annual Meeting*, March, 1944, pp. 424-425) that led to the establishment of the Committee on Public Issues. He continued to be a member of that committee until his death, having served previously as a member of the Executive Committee (1937-39) and a Vice-President of the Association (1942). It was Graham's hope that the well-reasoned views of experts

could be focused in such a way as to have a real influence on public policy.

Believing as he did in the need for straight thinking in practical affairs, Graham worked with a number of commissions and agencies. He was secretary to the American Commission of Financial Advisers to Poland (1926), economic adviser to the Business Men's Commission on Agriculture (1927), economic adviser to the Federal Farm Board (1930-31), member of the Commission on Cuban Affairs of the Foreign Policy Association (1934), and member of a team that investigated the Nazi economic penetration and conduct of the war (1946). His was, indeed, a full life.

In graduate seminars and classes, Frank Graham was at his best. His powers of penetrating analysis and sharp wit have left their stamp on graduate students at Princeton during the past three decades. His friendly but searching criticism stimulated students to work to the limits of their ability; he inspired them by the new ideas and viewpoints that emerged from class discussion. Especially generous with the time he devoted to helping students and colleagues, he formed deep and lasting friendships with the men with whom he worked. His former students are now establishing a Frank D. Graham Memorial Seminar Fund in his honor.

Members of this Association will long remember Frank Graham for his great gifts of intellect and character. In his passing the profession loses an outstanding champion of truth and human welfare.

RICHARD A. LESTER

REPORT OF THE SECRETARY FOR THE YEAR 1949

This report consists, first, of the minutes of the Executive Committee, which gives an official account of actions and activities, and, second, the Secretary's comments on the Association's operations for the year.

1. Minutes of the second meeting of the 1949 Executive Committee, Princeton, New Jersey, April 1-2, 1949:

The second meeting of the 1949 Executive Committee was held at Princeton Inn, Princeton, New Jersey, April 1-2, 1949. The meeting was called after luncheon and was continued through Friday and Saturday, adjourning at noon on the latter day. The following were present: H. S. Ellis, presiding, J. W. Bell, E. A. Goldenweiser, Gottfried Haberler, B. F. Haley, P. T. Homan, R. A. Lester, B. W. Lewis, P. A. Samuelson, T. W. Schultz, J. A. Schumpeter, and A. R. Upgren. Absent were P. H. Douglas and A. F. Burns. Members of the Nominating and Honors and Awards Committees were present by invitation, as were J. J. Spengler and F. H. Knight, representatives to the S.S.R.C. and A.C.L.S., respectively, D. H. Wallace, our representative to the N.B.E.R., and N. S. Buchanan, of the Rockefeller Foundation.

1. *Minutes.* The minutes of the Cleveland meeting of December 27-30, available in galley proof, were reviewed and accepted with minor corrections.

2. *President's Remarks* (H. S. Ellis). The order of business for the two-day meeting was outlined.

3. *Report of the Secretary* (J. W. Bell). The membership and subscription list of the Association was analyzed and described and data were submitted showing the present status of complimentary members, foreign complimentary subscriptions authorized for disposition by the Managing Editor and the Secretary, and those suggested by the Committee on Aid to Foreign Scholars.

Figures were submitted on the number of members according to their fields of specialization as listed in the 1948 *Directory*.

Several applications for the use of the Association's mailing list were submitted. The general policy now practiced with respect to granting permission and charges for the use of the mailing list was approved.

Copies of the revised information booklet were distributed and suggestions for its improvement were solicited.

Changes in the personnel and office facilities and equipment in the Secretarial Office were described. It was VOTED that the use of the title "Executive Assistant" be authorized for Miss Gertrude Tait.

The employment roster at the meeting in Cleveland listed 88 positions available and 206 applications were filed. Two vacancies and 25 applications for positions appeared in the March, 1949, issue of the *Review*.

4. *Report of the Treasurer* (J. W. Bell). A total of 1,683 persons registered at the Cleveland meeting, 1,114, or 66 per cent, of which were members of the American Economic Association. Registration fees to the net amount of \$1,490 were collected. To this amount were added \$1,868 from the sale of meal tickets and \$756 from advertising, producing a total revenue of \$4,125. Total expenditures of \$2,873 left a net surplus for distribution of \$1,251. Our Association's share of this amount was \$828. This apportionment was based on gross registration figures of all associations meeting jointly.

A chart was shown indicating changes in income and expenditures of the Association for the past several years and attention was called to the amount of shrinkage in our unappropriated surplus, which is now about \$58,000 compared with the peak of \$68,000 in 1946.

A copy of the charter and bylaws was circulated, showing the necessary changes involved in dues and subscriptions beginning next year.

5. *Finance Committee.* A list of our investment holdings as of March 19, 1949, was exhibited. The changes from the report as of December 7, 1948, are not substantial, bonds having declined about \$1,000 in market value, which amount is almost offset by a corresponding increase in the market value of stocks. The present members of the Finance Committee—R. C. Osgood, C. C. Wells, and J. W. Bell—were re-elected for the current year.

6. *Publications.*

6a) *American Economic Review* (P. T. Homan). Manuscript is flowing to the *Review* office at an increasing rate; only about one quarter of the volume received is accepted for publication. No comment was made on the change in the size of the *Review*. With regard

to the matter of translation of foreign classics, no further developments have occurred, except that the Managing Editor reported that he had personally expressed his interest to the Oxford University Press with regard to the translation of Sombart's works.

6b) *Papers and Proceedings and the 1948 Directory* (J. W. Bell). The preparation of the *Papers and Proceedings* as a supplement to the March number was frustrated by a bottleneck at the printers, and in order to avoid delay in the appearance of the March number of the *Review*, it was early decided to issue the *Papers and Proceedings* as a separate number in April or May. Arrangements have been made with the Post Office Department for the separate issue of this number. This will make a total of six numbers in 1949. Pagination complications have occurred as a result of the postal regulations which require the numbering of the *Directory* and of the *Papers and Proceedings* as parts or supplements of the *American Economic Review*. There would seem to be no solution to this problem except by the establishment of two editorial offices, which solution, however, involves other difficulties; hence no such move is contemplated at this time.

The total cost of 7,700 copies of the *Directory* amounted to \$6,903, which is some \$400 less than the estimated \$7,300 in the annual report. A hundred copies were ordered cloth-bound. These are for distribution to members of the Executive Committee, officers of allied associations, the Councils, and to meet special demands. Since the March number is now out, new members will not receive the *Directory* without special request.

6c) *Republications Series* (B. F. Haley). Up-to-date figures were made available on the sale of Volumes I-IV.

Since the republications project is now able to stand on its own feet, it was recommended that some compensation be afforded those whose time and effort is devoted to this enterprise. A schedule of fees has been worked out in consultation with Mr. T. A. Phillips, of The Blakiston Company. Effective with the volumes now under way, it was VOTED to authorize an honorarium of \$150 for each editor or co-editor, such amounts to be considered part of the publication costs, which are of course deducted before royalties are shared. It was also VOTED to authorize the Treasurer to draw another \$1,000 from The Blakiston Company when he desires to do so. Arrangements have been made to make an accounting of each volume at the time when the first printing is exhausted.

6d) *A Survey of Contemporary Economics*. The first edition of *A Survey of Contemporary Economics* although not completely sold out has been exhausted so far as orders on hand are concerned and a reprint of 3,000 additional copies was ordered in March. Requests have been received for permission to make translations in both the Japanese and Spanish languages. The general policy of approving rights for foreign translations was discussed, both from the point of view of the Association and of the publishers. It was reported that The Blakiston Company would approve our recommendation for granting rights, at a nominal fee of \$50 to \$100. For some countries even this small fee would offer an insuperable obstacle; for instance, Germany and central European countries with their dollar exchange problems. It was VOTED to leave the matter of publication rights to the Chairman of the Committee, in consultation with the President and Secretary and with the officials of The Blakiston Company.

The success of the first volume prompted the suggestion that a second volume be authorized, one covering fields which were left undone in the first volume—such gaps, for instance, as population, social security, econometrics, public finance (with respect to the structure of taxation rather than fiscal policy), transportation and public utilities, and public policy integrated with cognate fields. It was suggested that a new edition of the present volume should not come out before 1953.

It was VOTED to refer back to the Committee for their consideration and report the matter of issuing a second volume of *A Survey of Contemporary Economics* or the reprinting of the first volume with additional chapters, or to consider any other proposals which might be suggested.

7. Committee Reports.

7a) *Research* (S. E. Leland). A meeting of this Committee was held at Princeton on Thursday preceding the meetings of the Executive Committee. Among the matters discussed were: (1) the desirability of sponsoring the issue of a follow-up volume to *A Survey of Contemporary Economics* with the support of foundation help (see 6d); (2) the feasibility of publishing a section in the *Review* devoted to research projects in progress, news items concerning research documents and other developments; (3) the establishment of a clearing house for research information in the Managing Editor's office; (4) the translation of foreign classics in the field of economics or the co-operation with other professional organizations—possibly the S.S.R.C.—in the translation of works in the social sciences generally.

The role of the Committee on Research was the subject of further discussion and its functions were conceived in the following terms: as an agency available to help direct the allocation of foundation funds; to study and report on problems concerning the allocation of funds in universities; to consider the immediate and long-run effects of government contracts and subsidies, e.g., the Rand research development; and, finally, to assist in the mobilization of research materials for the profession. The Committee on Research should always be available to co-operate with other committees such as the one on organization of research of the S.S.R.C. and corresponding committees of councils, foundations, and universities. It was suggested that the Committee submit a report on its purposes and functions.

It was VOTED to discharge the R.O.E. Committee with thanks and refer its functions (e.g., the publication of a second volume or a revision) to the Committee on Research.

7b) *Public Issues* (S. H. Slichter). Communications were read from the Chairman describing the present status of the work of its two subcommittees on economic stability and on international economic policy. Also suggested in this communication was the investigation of some of the industrial problems associated with atomic energy. No action was taken on the latter suggestion. It was VOTED to ask the Chairman to submit a final report of the subcommittees at the December meeting. The question of continuation of this work would be reconsidered at that time.

7c) *Teaching of Economics and Training of Economists* (Horace Taylor). The Committee's request that certain reports of subcommittees be published in early numbers of the *American Economic Review*, lest the results become obsolete before the full report is completed, was opposed on the ground that such piecemeal publication would not be suitable and to convey word to the Committee that we hope that its work would by the end of the year result in reports which would merit publication. Subcommittee reports could be circulated in mimeographed form to participants in the December round table on the teaching of economics. With the completion of the reports now in progress, it is expected that the Committee's function will have terminated. Thereafter the teaching of economics and so forth can be handled as part of annual programs; i.e., without the need of a permanent committee.

7d) *Aid to Foreign Scholars* (Mabel Newcomer). A report from the Chairman indicated that the Committee hopes to wind up its affairs this summer. The Secretary reported on the operations of the aid to foreign scholars program. No action was called for.

7e) *International Co-operation* (Gottfried Haberler). A draft of a proposed constitution for an International Economic Association, prepared by Professor Robert Mossé, was reviewed paragraph by paragraph, and after some discussion it was VOTED that Professor Haberler be authorized to attend the forthcoming conference in Paris on April 5-6 and to express the sentiments of the Executive Committee as being in favor of a small, modest beginning in organizing an international association, preferably on the basis of national associations, that the relation to UNESCO be strictly financial, that we are much concerned about the selection of an executive secretary of high quality, and, finally, that we would approve financial support if called upon to an amount not to exceed \$500 toward meeting organizational expenses.

7f) *Academic Freedom* (F. C. Mills). This is a stand-by committee which during the past year has received no requests to act.

7g) *Honors and Awards*. The members of this Committee (I. L. Sharfman, Chairman, G. L. Bach, R. T. Bye, C. B. Hoover; absent, F. B. Garver, E. S. Shaw) were invited to join with the members of the Executive Committee to constitute an electoral college for the purpose of selecting a candidate for the J. B. Clark medal. On the question of whether or not absent members should be able to vote by proxy, it was ruled that their votes should be counted on the first tally. Thereafter ballots were cast on the two candidates receiving the highest vote. The name of the person to whom the J. B. Clark award is to be made at the December meetings will be considered secret until the time of the award.

The Committee raised the following questions: (1) should the age limit of candidates for the J. B. Clark medal be raised from forty to forty-five years; (2) is the J. B. Clark award one that we should continue to make; and (3) what procedure should be followed in making the selection? The answer to the first question was to permit the present age limit to stand and to the second question, to carry on at least for another award or two. With respect to procedure, it was VOTED to follow the practice adopted this year of merging the two committees, namely, the Honors and Awards and the Executive Committees, as an electoral college, but that the Francis A. Walker award be made at the same time as the J. B. Clark award and, to accomplish this, that the latter be made twice every five years instead of once every two years.

The Secretary-Treasurer was authorized to have struck at this time ten bronze J. B. Clark and five silver F. A. Walker medals.

7h) *Nominating Committee.* The members of the Nominating Committee (S. E. Leland, Chairman, J. K. Hall, Margaret G. Reid, L. G. Reynolds, E. C. Simmons, and W. F. Stolper) and of the Executive Committee meeting jointly as an electoral college after giving due consideration to the names proposed, proceeded by ballot to select the nominee for the office of President for the year 1950. After the nomination was made, the Secretary notified the nominee and received his acceptance.

The slate of candidates for the remaining offices to be filled was submitted by the Nominating Committee, together with names of alternates in case those on the preferred list should not all accept. It was VOTED to authorize the publication of this slate, with an explanatory note describing the purpose of such procedure, in the June issue of the *Review*.

The present system of election was again the subject of full discussion and it was VOTED to empower the President to appoint a Committee on Election Procedure for the purpose of reviewing our experience and submitting a report to the Executive Committee. The Committee consists of President Ellis, the nominee for the 1950 presidency, and two past presidents—E. A. Goldenweiser and J. A. Schumpeter. Reference was made to the previous reports of 1934, 1940, and the Secretary's Report in the *Proceedings* of February, 1941.

7i) *Foreign Honorary Members.* The J. S. Davis committee having been discharged upon completion of its assignment, it was suggested that a new committee be constituted to report candidates at the next meeting of the Executive Committee. The list of foreign honorary members now numbers seventeen, leaving eight to be chosen before we reach the limit of twenty-five.

8. *Reports of Council Representatives.*

8a) *A.C.L.S.* (F. H. Knight). The history of the A.C.L.S. was reviewed by our representative, who put special emphasis on the relationship of this Council to international organizations. Its organization was prompted by the existence of the International Union of Academies and it has retained this international connection throughout its existence. Under its recent reorganization, a panel has been established on international cultural relations to effect a liaison with UNESCO. The present organization of the A.C.L.S. and the Conference of Secretaries of Constituent Societies (of which our Secretary is the President) was briefly described.

Under the reorganization plans, each constituent society has but one delegate to the Council. Since provision is made for the rotation of the terms of these delegates, a drawing was made to determine the initial sequence. The American Economic Association drew a four-year term, which will begin at the expiration of F. H. Knight's term in 1950.

It was VOTED to approve the proposed amendment and transitional measures effecting the organization of the Council which was submitted to the constituent societies for their ratification, and the Secretary was ordered to advise the executive offices of the A.C.L.S. of this action.

8b) *S.S.R.C.* (J. J. Spengler). The present method and procedure of the various constituent associations in selecting representatives was the basis of an informal oral report given by our representative. Professor H. A. Innis, whose term expires this year, was re-elected for another term. This action was taken at the joint meeting of the Nominating and Executive Committees.

8c) *N.B.E.R.* (D. H. Wallace). The report printed in the *Proceedings* and before the Committee in galley form was reviewed with interpretations.

9. *New Business.*

9a) It was VOTED to authorize the appropriation of \$200 for the President's clerical and other expenses connected with the program.

9b) A letter from Dr. Howard S. Piquet was read, expressing his desire to resign as the Association's representative to the American Documentation Institute. It was VOTED to accept his resignation. No successor was appointed.

9c) *Foreign Translations.* In answer to the inquiry as to whether or not the A.E.A. should sponsor a translation series, it was VOTED to empower the President to appoint a committee of three to study this subject and submit a report. (See items 6a and 7a.)

9d) *Economic Abstracts.* A communication was read suggesting that the Association issue a publication similar to the *Social Science Abstracts* but limited to the field of economics and with abstracts of longer and more comprehensive nature than those found in the defunct *Social Science Abstracts*. It was pointed out that this proposal has often been revived with the S.S.R.C. The Council, however, has not been inclined to favor the suggestion but has

preferred to encourage improving sections in the various journals devoted to review articles. No action was taken.

9e) *Business Economists and the A.E.A.* A protest was communicated to the President, complaining that business economists were not adequately represented in the organization and activities of the A.E.A. Although separate sections or segments have been established in the American Statistical Association and the American Marketing Association for promoting the special interests of members in the nonacademic and nongovernmental groups, no such proposal was made, nor was it proposed that a separate organization be established. The plea was rather for a recognition of these members in the consideration of candidates for office, participants in the annual program, contributors to the *Review*, and other activities. It was suggested that no professional lines are being drawn in the selection of personnel but that each member stands on his own merits.

9f) *The 1949 Annual Meeting.* The rest of the session was devoted to the consideration of arrangements and program for the annual meeting to be held at Hotel Commodore and neighboring hotels in the Grand Central area, December 26-30.

2. Minutes of the Christmas meetings of the Executive Committee held in New York City, December 27 and 30, 1949:

The *third meeting of the 1949 Executive Committee* was held at Hotel Commodore, New York City, December 27, 1949. The following were present: H. S. Ellis, presiding, J. W. Bell, A. F. Burns, E. A. Goldenweiser, Gottfried Haberler, B. F. Haley, P. T. Homan, R. A. Lester, B. W. Lewis, P. A. Samuelson, T. W. Schultz, J. A. Schumpeter, and A. R. Upgren. Absent was P. H. Douglas. Also attending this meeting were: President-elect F. H. Knight, Vice-President-elect Clair Wilcox, past President I. L. Sharfman, and G. W. Stocking, representative to the S.S.R.C., and D. H. Wallace, representative to the N.B.E.R.

The *first meeting of the 1950 Executive Committee* was held on December 30, 1949. The following were present: F. H. Knight, presiding, J. W. Bell, A. F. Burns, H. S. Ellis, B. F. Haley, R. A. Lester, J. A. Schumpeter, and Clair Wilcox. Also attending were: past Presidents J. S. Davis, S. H. Slichter, and E. G. Nourse, and S. E. Leland, B. W. Lewis, and Horace Taylor. Absent were: L. V. Chandler, P. H. Douglas, R. A. Gordon, P. T. Homan, E. S. Mason, and P. A. Samuelson.

The account of the procedure given below does not follow the chronological order of business but treats the sequence of items as they were listed on the agenda. This is done in order to avoid the confusion which resulted from the rearrangements made to accommodate the schedules of several members who were not able to be present throughout the entire period. Items 1, 2, 3, 4, 5g, 5j, 6b, and 6c were taken up at the meeting on December 27 and the other items on the 30th.

1. *Minutes.* The minutes of the Princeton meeting of April 1-2, 1949, were approved as corrected.

2. *President's Remarks* (H. S. Ellis). In outlining the business before the Committee, Professor Ellis explained the reasons for making changes in the order of items, as described.

3. *Report of the Secretary-Treasurer and Finance Committee* (J. W. Bell). The highlights of the year's operations were reviewed, with special emphasis on the items involving the activities of the Association's officers and committees requiring action. The financial condition of the Association was analyzed and a brief report was made of the status of our investment portfolio.

4. *Report of the Managing Editor of the Review* (P. T. Homan). The report of the Managing Editor was read, and it was VOTED to approve the budget submitted for the ensuing year. From the panel of names submitted by Dr. Homan, the following appointments to the Editorial Board were approved: Moses Abramovitz to succeed R. A. Gordon and William Fellner to succeed Arthur Smithies. A communication from Dr. Homan concerning his desire to terminate his tenure in office was read and the incoming president was authorized to appoint a committee to study the problem of selecting a successor and report within the next year. Dr. Homan was re-elected for another three-year term with the understanding that his successor would be found sometime in the interim.

5. *Committee Reports.*

5a) *Republication* (B. F. Haley). The first four volumes of the Republication Series are going well. The Blakiston report of sales shows satisfactory results and the account shows a gratifying profit if we count the inventory value of unsold volumes. Three volumes now under way, on monetary policy, on public finance and fiscal policy, and on price theory,

will materialize this year and next. Topics for subsequent volumes are being considered; e.g., industrial organization, welfare economics, business cycles. English publication rights for this series were sold on a 10 per cent royalty basis to George Allen & Unwin, Ltd.

It was suggested that in future volumes the bibliography be extended to include a limited list of leading books in addition to the titles of articles.

5b) *Research* (S. E. Leland). As previously noted, this Committee last year absorbed the function of the Committee on Review of Economics. In view of the favorable reception by the profession of *A Survey of Contemporary Economics*, the Committee proposed the preparation of a follow-up volume or sequel, this second volume to cover the development of certain areas or fields of economics not treated in the first. It was estimated that the sum of \$10,000 would suffice to finance this project (this being the approximate cost of the first volume) and that the volume would eventually carry itself. If this undertaking should duplicate the success of the initial one, the Committee envisages future volumes at intervals of two to five years.

It was VOTED to approve the Committee's proposal to proceed with the preparation of a second volume on *A Survey of Contemporary Economics*; to authorize the Committee to prepare a prospectus and to submit the proposal to foundations and publishers in soliciting financial support and publication outlet. The sum of \$2,000 was appropriated supplementary to the present \$513 unexpended balance for organization and initial editorial expense.

Professor B. F. Haley has accepted the editorship of this volume.

The Committee also proposed initiating a new series; viz., translations of classics. Among the titles suggested were: Walras, *Elements d'Economie Politique Pure*; Pareto, *Manuel d'Economie Politique*; Heckscher, *Economic History of Sweden*; Menger, *Grundsätze*; Spiethoff's article on business cycles in the *Handwörterbuch*; von Stackelberg, *Marktform und Gleichgewicht*; Marx, *Theorien über Mehrwert*.

It was VOTED to authorize the Secretary to negotiate contracts with authors and publishers. It was suggested that we clear this project with the London School, publishers of Scarce Tracts, in order to avoid working at cross purposes and to obtain their good will in this venture.

The Committee is interested in the compilation and publication of a list of private economic committees, institutes, foundations, etc., either by the Association or by the S.S.R.C. (See 8f.)

5c) *Teaching of Economics and the Training of Economists* (Horace Taylor). This Committee, established some five years ago, has carried on extensive investigation of this subject, principally through the work of its eleven subcommittees. It has submitted progress reports at intervals and papers presented at round tables have been published (see reports of the Secretary and of the Committee, 1945) and is now prepared to move that an over-all summary report and recommendations be published as a supplementary volume (of about 180 pages) to the *American Economic Review* sometime during the current year. The Committee also recommends that it be constituted as a standing committee; that the constitution of a Committee on Graduate Training be authorized; that the American Economic Association affiliate with the National Council on Social Studies and the Committee on Economics in Secondary Schools of the U. S. Office of Education.

It was VOTED to authorize the publication of the Committee's report as a supplement to the *American Economic Review*. No action was taken on the other recommendations.

5d) *Public Issues* (S. H. Slichter).

(1) The Subcommittee on Economic Stability turned in a final report on November 26, 1949. The Committee recommended the publication of this 20-25 page report, either as (a) a supplement to the *American Economic Review*, (b) an article in the *American Economic Review*, with reprints for general distribution, or (c) by the government under the imprint of the Joint Economic Committee Report. It was recommended that review copies be sent to business publications and that it be announced or advertised in the *Harvard Business Review* and *Barron's Weekly*, etc. The report was accepted but no action was taken.

It was pointed out that the Association assumes no responsibility for the reports of this Committee beyond the printing. The responsibility for content of the reports is solely that of members signing.

(2) The work of the second subcommittee (on International Economic Problems) is far from complete but results—consensus or lack of it—should materialize by April, 1950.

The question of what to do about the Committee on Public Issues was discussed. It was pointed out that the report on economic stability is a narrow bit of evidence by which to judge the value of the work of the Committee. Other public issues might be worth working on; e.g., tax issues, agricultural policy, industrial relations.

If we continue the life of the Committee, it was proposed that its membership be rotated, two on and two off each year, in order to insure continuity and effectiveness. D. H. Wallace was appointed to fill the vacancy created by the death of F. D. Graham.

5e) *Aid to Foreign Scholars* (Mabel Newcomer). The report received was read and a vote of appreciation was expressed for the effective and sympathetic service which the members of this Committee rendered in soliciting and disbursing the funds, books, etc., contributed for this deserving purpose. Its work done, its resources expended, the Committee was discharged.

5f) *International Co-operation; the I.E.A.* (Gottfried Haberler). After hearing an account of the July 15, 1949, meetings of the preliminary organization group and a review of the provisions of the tentative draft of the proposed I.E.A. charter, it was VOTED to accept the report and the Secretary was authorized to assure our participation in the organization and its activities when an official invitation is received. Article IV of the Statute was interpreted to mean that the four delegates allotted to the A.E.A. could be appointed by the President with the approval of the Executive Committee, two for the short term (three years) and two for the long term (six years).

5g) *Honors and Awards* (I. L. Sharfman). The procedure in selecting candidates for the F. A. Walker and the J. B. Clark awards was reviewed at length and it was finally VOTED to rescind the action taken at the spring meeting of the Executive Committee and revert to the *status quo ante*, with the understanding that only the chairman of the Honors and Awards Committee need be present at the spring meeting of the Executive Committee in the years in which awards are made and that he present the sealed preferential ballots of the other members of his committee, together with communications and other evidence reflecting the thinking back of the decisions made. The next award of the J. B. Clark medal will be in 1951 and the F. A. Walker medal will be awarded in 1952.

5h) *Foreign Honorary Members*. This Committee has been reconstituted with the following membership: W. J. Fellner, Chairman, J. W. Angell, W. W. Leontief, and N. S. Buchanan.

5i) *Nominations* (F. H. Knight). The Committee named to recommend names of officers and members of the Executive Committee to be elected in 1950 for the year 1951 is constituted as follows: C. B. Hoover, Duke University, Chairman, Jacob Viner, Princeton University, Elizabeth Hoyt, Iowa State College, Carter Goodrich, Columbia University, H. R. Bowen, University of Illinois, A. C. Neal, Federal Reserve Bank of Boston.

5j) *Academic Freedom* (F. C. Mills). Professor Sharfman reported that only one case had come before the Committee during the year and that in that case no violation of academic freedom within the terms of reference of this Committee seemed to be involved; hence there was no basis for specific action by the Committee. However, in order to clarify its interpretation of its function, the Committee wished to have its concept of its responsibilities spread on the records; to wit: "Our Committee is of the opinion that its concern is limited to cases involving the right of university and college teachers of economics 'to select for use in their teaching and research such textbooks and related materials as they, no others, believe will promote the purposes which their courses are intended by the teachers to serve.' It is the view of the Committee that it would be unwise, and beyond our mandate, to concern ourselves with other aspects of academic freedom."

5k) *Ad Hoc Committee on Election Procedure* (H. S. Ellis, J. A. Schumpeter, F. H. Knight). After further consideration of the proposals made at the spring meeting of the Executive Committee and the objections to the changes proposed, the Committee decided to make no recommendations on ways of democratizing our election procedure.

6. Reports of Council Representatives.

6a) Professor Knight reported informally on the organization changes affecting the A.C.L.S. during the past year and on its activities in general and on our relationship to the A.C.L.S. in particular.

6b) Dr. George W. Stocking presented a report on the activities of the S.S.R.C. on behalf of our representatives to that Council. Professor Spengler has recently been appointed to succeed Professor Slichter as member of the important Problems and Policy Committee. These appointments only come to those representatives whose term in office has been sufficiently long to acquaint them with the operations and policies of the Council.

6c) Professor D. H. Wallace reported informally on the activities of the National Bureau of Economic Research.

These reports will be printed in the *Proceedings*.

7. *Appointment of Officers*. Professor Bell was re-elected Secretary-Treasurer and Dr. Homan as Managing Editor (see 4) for another three-year term. The present members

of the Finance Committee (C. C. Wells, R. C. Osgood, and J. W. Bell) were reappointed for another year. Mr. John E. Walker, Association counsel, was reappointed for another three-year term. Professor Wallace was re-elected for another five-year term as representative of the N.B.E.R.

8. *Miscellaneous Business.*

8a) Professor Ellis reported that the message of the members of the Executive Committee to President Truman had been acknowledged. No further repercussions have been noted.

8b) Recent statements of groups of economists, including members and officers of the Association, have been interpreted as statements of opinion "representing" the profession. Instances were cited and the matter briefly discussed. It is difficult to educate the public to understand that such statements represent only the opinion of the signers and can in no way commit the Association or the profession. Further discussion of this measure was postponed until the spring meeting.

8c) The President received a proposal from government sources requesting that the American Economic Association provide systematic coverage of government research. Except for more liberal treatment in the *American Economic Review*, the opinion was expressed that this matter fell rather within the province of government agencies than within the scope of our responsibilities.

8d) The request that the American Economic Association participate on the Joint Council of Economic Education was referred to the Committee on the Teaching of Economics. No formal action was taken.

8e) The Association was requested to submit nominees for the Committee on the Graduate Record Examination Advanced Test in Economics. For the record, the names of these nominees, with alternates, follow: Nominees—G. S. Peterson, Chairman, Mary Jean Bowman, Milton Friedman, B. W. Lewis, J. J. Spengler; Alternates—B. W. Knight, A. G. Hart, K. E. Boulding, L. G. Reynolds.

8f) The Secretary proposed that a new exhibit be included in the next edition of the American Economic Association *Directory* to show the list of private economic committees, institutes, boards, foundations, etc., which would aid those interested in identifying their purposes, activities, and control. It was suggested that help on this matter should be obtained from the councils.

8g) The Secretary proposed that a section of the *Review* be devoted to the announcements of prospective retirements of economists in American colleges and universities—the announcement to appear following the "Notes" and preceding the section on applications and vacancies. The Editor will attempt to implement the suggestion.

9. *Annual Meeting.*

9a) A report on local arrangements for the New York meeting was withheld pending the compilation of registration statistics and other data which will be available for the spring meeting.

9b) The Secretary reported results of the discussion at the breakfast meeting of the conference of secretaries of the Allied Social Science Associations. Hotel reservations and other arrangements are already being made for the meetings in Chicago in 1950, Boston in 1951, Chicago in 1952, and beyond.

10. It was VOTED that the spring meeting of the Executive Committee be held at the Princeton Inn, Princeton, New Jersey, on Friday and Saturday, either March 31-April 1, April 7-8, or April 14-15, depending upon the availability of hotel facilities.

ACTIVITIES AND OPERATIONS

Annual Meetings. In keeping with our plans to co-operate as closely as possible with allied associations, we are meeting this year in New York City on an all-out joint arrangement basis. Fourteen associations have selected this time and place for their meetings and we are holding joint meetings with eight. Although we have made no formal arrangements to meet with Section K of the A.A.A.S., some of our members are participating in meetings being held concurrently in the Pennsylvania group of hotels.

Preliminary arrangements have been made for meeting independently in Chicago in 1950, with headquarters at the Palmer House, and in Boston in 1951, with headquarters at Hotel Statler. Associations whose membership is

largely included in ours will naturally choose to follow us at these places, but other associations with smaller overlapping memberships will seek accommodations in other cities. In 1952 another all-out joint meeting is planned for Chicago, with our Association being headquartered at the Stevens Hotel.

A meeting of representatives of the allied associations is scheduled for the purpose of planning arrangements beyond 1952.

Membership. The 1948 *Directory* contains a chart showing growth of the Associations membership and subscriptions, 1886-1948 (see Appendix, page 314). Our Association has continued its growth during the past two years, our membership having increased from 5,902 in 1948 to a present figure of 6,631. Respective figures for subscribers are 2,448 and 2,486. The totals, including complimentary subscriptions, have increased from 8,363 last year to 9,135. Exhibit II contains a breakdown showing changes in regular, junior, family, complimentary, life, and honorary memberships. Perhaps the reason why our growth has been so sound is the fact that our new members come to us as a result of personal solicitation by older members. This obviates the necessity of devoting time and money to membership campaigns.

The number of copies of our publications now printed has increased from 9,100 last year to 9,800. The margin of extras will be absorbed by the demands of new members and the growth of subscriptions and sales. The allowance is none too liberal.

Geographical Distribution. Table V of the 1948 *Directory* (page 317) shows the geographical distribution of members and subscribers for selected years from 1933 to 1948. Figures for previous years, back to 1919, are shown in the table on page 460 of the *Papers and Proceedings* for May, 1945. Concentration of membership is still heaviest in the northeast and middle states and no notable changes have taken place during the past two years. Foreign members and subscribers still continue to increase and now number over 1,100, compared with less than 500 before the war. South American members and subscribers have increased slightly during the year.

Publications. The activities of the Board of Editors and the status of the *Review* are covered in the report of the Managing Editor.

The *Papers and Proceedings* of the Cleveland meeting were again issued as a separate number in May. With the present size of the *Papers and Proceedings* and of the *Review*, it is doubtful that both can be prepared and printed to appear together in March. Our efforts to control the size of the *Papers and Proceedings* were partially successful, but the volume of 537 pages is still quite large. The "Proceedings" section (pages 475-524) was reprinted under separate cover and distributed to officers of the Association and to others on request. The cost of the volume (9,500 copies) was \$8,196.

The 1948 *Directory* was sent to all members gratis but sold to subscribers and others and has had a sale of \$1,570, which will serve in part to defray the cost of the volume: \$6,948. We anticipated somewhat larger library sales at \$3.00 per copy. However, even if no further sales are made, the usefulness of the *Directory* to the profession justifies the outlay.

The information booklet describing the purposes and activities of the Association and the character of its publications was re-edited and distributed to

officers and to prospective members and others interested in joining the Association or knowing what it is and what it does.

Photographs of past Presidents Joseph A. Schumpeter, Wesley C. Mitchell, Allyn A. Young, and Edwin W. Kemmerer appeared as frontispieces in the *Review* this year. The usual biographical sketches appeared on the back of the frontispieces.

The section in the *Review* devoted to the announcement of vacancies and applications for positions continues to appear. The number of inquiries seems not to have fallen off.

The Employment Register, first started at Atlantic City in 1946, has become a feature of the annual meetings since. Announcements of vacancies are compiled and distributed in mimeograph form to those present and applications for positions are filed in folders of twenty-five each for the inspection of those interested. Blackboard messages facilitate the process of arranging interviews for which conference rooms are provided. About fifty vacancies and some four hundred applications were recorded at the New York meeting.

Committee Activities.

Committee on Republications (B. F. Haley, Chairman). This co-operative arrangement with The Blakiston Company has turned out to be a successful venture. The first four volumes of the series have all been well accepted. We have withdrawn \$2,000 from the account and further profits will materialize. Volumes V, VI, and VII are in the process of preparation. Still another volume, on the scope and method of economic history, not part of the economic series, is being published in co-operation with the Economic History Association. The republications idea has been implemented by the American Farm Economic Association which has sponsored a volume on agricultural policy, also published by The Blakiston Company.

Committee on Research (S. E. Leland, Chairman). The Committee on Research has taken over the functions of the old R.O.E. Committee and is considering the desirability and feasibility of an Association-sponsored follow-up volume to *A Survey of Contemporary Economics*. The Committee is also exploring the prospects of translation of foreign classics in the field of economics, proposed methods of mobilizing research materials for the profession, and the allocation of research funds by foundations and universities. No report has been submitted by the Committee but an account of its activities may be found in the minutes of the Executive Committee for December 27 and 30, 1949.

Committee on Public Issues (S. H. Slichter, Chairman). Reports are expected from the two subcommittees: Economic Stabilization (D. H. Wallace, Chairman) and Foreign Economic Policies (P. H. McCracken, Chairman). The establishment of a subcommittee to deal with a third topic has been withheld pending the completion of the work of the first two subcommittees.

Committee on the Teaching of Economics and the Training of Economists (Horace Taylor, Chairman). The completion of reports now in progress is expected in 1950. Consideration will be given to the publication of the results as a supplement to the *American Economic Review*. The work of the eleven subcommittees has been spread over the past several years and a large amount of material has been collected and processed. We have had the aid of Dr. J. L.

Phalan, of the Office of Education, as well as the co-operation of similar committees of allied associations. Discussions and reports of progress have appeared from time to time as part of the *Papers and Proceedings*, and a session on the teaching of economics is scheduled on this year's program.

Committee on Aid to Foreign Scholars (Mabel Newcomer, Chairman). The members of the Association, in response to the request for assistance, contributed a sum of over \$1,200 and more than 2,000 books and journals. The money, along with an appropriation of \$100 from the Association, was spent for books published during the war period and back files of journals to replace those damaged and destroyed in selected universities. A list of books purchased is on file at the office of the Secretary. Members of the Association should be grateful to Professor Mabel Newcomer and her associates on the Committee for the painstaking care and the judgment they have used in effectively administering these funds in a most deserving cause.

Useful by-products of the work of the Committee are the leads which we got of the names and addresses of needy scholars in the European countries and in the contacts which we were able to make with institutions and committees co-operating with us in this work. The Committee wishes to thank all members of the Association who contributed money, books, or journals.

Committee on International Co-operation; the I.E.A. (Gottfried Haberler, Chairman). The Exploratory Committee appointed to investigate opportunities for re-establishing international contacts in co-operation with UNESCO reported favorably on a proposed draft of a constitution for an International Economic Association. Professor Haberler was authorized to attend a conference held in Paris in July, 1949, and to express the sentiments of our Executive Committee as favoring the organization of an International Economic Association. Such an organization was initiated at the Paris meeting, members consisting of existing national associations or groups of economists, and interim officers were selected. Plans were made for a more permanent organization and for a future meeting and conference to be held in France in September, 1950. Our approval of the organization and the proposed program is an item on the December agenda.

Committee on Academic Freedom (F. C. Mills, Chairman). This Committee has been relatively inactive during the past year. Few cases involving academic freedom have been called to their attention. An interpretation of the Committee's concept of its responsibilities is recorded in the Executive Committee minutes for December 27 and 30, 1949.

Committee on Honors and Awards (I. L. Sharfman, Chairman). Two years having elapsed since the last award of the J. B. Clark medal, the Committee was again called into action. They screened a large number of candidates and submitted their recommendations for a nominee. With little precedent to go on, some question arose with respect to the procedure and some questions not fully resolved were left for future consideration. The Secretary was authorized to have struck at this time ten bronze J. B. Clark and five silver F. A. Walker medals.

Committee on Foreign Honorary Members. The list of foreign honorary members now numbers seventeen, which falls eight short of the limit of

twenty-five permitted by the bylaws. A new committee is being constituted for the purpose of submitting a panel of recommendations to the Executive Committee at the April meeting.

Nominating Committee (S. E. Leland, Chairman). This Committee, having performed its function, was discharged with appreciation which is due members of this hard working group.

The perennial question of democratic procedure in the selection of Association officers was again raised and became the subject of protracted discussion at the last meeting of the Executive Committee, and the President was requested to appoint a Committee on Election Procedure for the purpose of reviewing our experience and submitting a report to the Executive Committee. H. S. Ellis, I. L. Sharfman, and F. H. Knight were selected as members of the committee. This is a matter of great interest to the members of the Association and of great importance. We solicit suggestions and recommendations. Communications from individuals or groups of members are always welcome. To those interested in the reasons for past changes in election procedure, reference may be made to previous reports of 1934, 1940, and the Secretary's Report in the *Proceedings* of February, 1941.

Committee on Elections (L. A. Metzler, Chairman). This Committee held its usual meetings to prepare ballots and election material and to scrutinize the accuracy of the ballot count.

Reports of Council Representatives.

American Council of Learned Societies (F. H. Knight). In accordance with the action taken at the annual meeting of the A.C.L.S., January 28, 1949, pertaining to the terms of office of delegates of constituent societies, our present representatives will be expected to attend the annual meeting in January, 1950, and to serve through December 31, 1950. A new election for a four-year term, beginning January 1, 1951, must therefore be held by the A.E.A. sometime during 1950.

Your Secretary attended the annual meeting of the Council at the Claridge Hotel, Atlantic City, January 27-28, 1949. As President of the Conference of the Secretaries of the Constituent Societies, he conducted three sessions of that group and attended the sessions of the Council. The agenda of the meetings of the secretarial group were chiefly concerned with activities and problems of the member societies but involved reports as well on questions of broader interest, such as scholarly publication, international co-operation among the scientists and professional organizations and personnel, and the recruitment of manpower. At a joint session with the Board of Directors, Mr. Henry M. Silver, executive staff adviser on publications, presented a full and detailed report on printing and publishing problems. Dr. Charles E. Odegaard, Executive Director of the A.C.L.S., described the policy of his office with respect to the appointment of Mr. Silver as adviser on publications and Mr. J. F. Wellemeyer as adviser on personnel studies and indicated that their services would be available in helping constituent societies in working out their special problems in these fields. Your Secretary wishes to take this occasion to express our appreciation of the useful services already rendered by Messrs. Silver and Wellemeyer.

Messrs. James Washington Bell and William Riley Parker were re-elected President and Secretary, respectively, of the Conference of Secretaries for the coming year.

Social Science Research Council (G. W. Stocking). Our representative has submitted a report of the activities of the S.S.R.C. for the past year.

National Bureau of Economic Research (D. H. Wallace). The five-year term of our representative expires February, 1950.

Professor Wallace presented an oral report on the activities of the National Bureau. Dr. A. F. Burns, Director of the Bureau, also spoke informally of the problems engaging their attention and of the relationship between the societies and the research organization.

* * *

Members reading this report may be interested in items recorded in the minutes of the Executive Committee meeting of December 27 and 30, 1949, appearing under "Miscellaneous Business."

Representatives of the Association on Various Occasions

Inauguration of Delyte Wesley Morris as President of Southern Illinois University

Lewis A. Maverick

Inauguration of Walter S. Newman as President of Virginia Polytechnic Institute

B. O. Miller

Inauguration of Albert Charles Jacobs as Chancellor of University of Denver

Fitzhugh L. Carmichael

Inauguration of Juvenal Lalor as President of St. Bonaventure College

James L. Hayes

Inauguration of Dr. J. E. Wallace Sterling as President of Stanford University

Bernard F. Haley

Inauguration of William Bay Irvine as President of Marietta College

Robert F. Clark

Inauguration of Arthur Hollis Edens as President of Duke University

Dudley D. Carroll

Inauguration of D. M. Wiggins as President of Texas Technological College

Ernest Willis Gibson

Inauguration of Ralph B. Draughon as President of Alabama Polytechnic Institute

Charles P. Anson

Inauguration of Alfonso Elder as President of North Carolina College

Frank T. de Vyver

Centennial and Inaugural Ceremonies at Michigan State Normal College

Z. Clark Dickinson

Mailing List. The use of the mailing list was granted to the following:

Swift & Company

To send copies of their annual report

Public Affairs Institute

To send study, "The Role of Collective Bargaining in a Democracy"

Institute of Life Insurance

To send 1948 and 1949 Fact Books

Stanford University Press

To circulate an announcement of *Economic Theory of a Socialist Economy*, by Burham P. Beckwith

Trade and Industry Law Institute

To send announcement regarding pamphlet reporting symposium on President's program to strengthen and stabilize American economy

British Information Services

To send leaflet on *Britain's War Economy*, by W. K. Hancock and M. M. Gowing

M. W. Drexler Book Company

To send new catalogue of advanced standard works in economics, history, political science, and international law

Science Service

To send special rate card

United States Department of Commerce

To send announcement of *Survey of University Business and Economic Research Projects, 1947-48*

August M. Kelley, Inc.

To announce *Two Memoirs*, by J. M. Keynes

American Institute for Economic Research

To send announcement of fellowship awards

Social Science Foundation, University of Denver

To send announcement of Institute for the Study of the Soviet Union

It is with regret that the names of the following persons have been removed from our active membership list, notice of their deaths having been received during the year.

Benjamin M. Anderson

Pelham Barr

Thomas A. Beal

Charles J. Brand

Daniel Carson

Frank A. Fetter

Alexander Fleisher

William A. Frame

Eneas B. Goodwin

Paul P. Gourrich

Frank D. Graham

Paul Haensel

Charles A. Hales

Herbert W. Hess

Hans Heymann

Harry A. Hopf

John T. Madden

Charles R. Metzger

Gerald Morgan

Albert H. Mowbray

Albert Shaw

Ján Tarbajovský

Alonzo E. Taylor

Frank J. Warne

John Zmachinski

Respectfully submitted,
JAMES WASHINGTON BELL, *Secretary*

EXHIBIT I
PUBLICATION COSTS

Year*	PROCEEDINGS		Cost	Number of Pages	HANDBOOKS	
	Number of Pages	Number of Copies			Number of Copies	Cost
1930	222	4,300	\$1,353.91			
1931	308	4,300	1,919.18	88	4,200	\$ 589.54
1932	316	4,200	1,819.75			
1933	216	4,000	1,284.85	88	3,900	522.71
1934	232	3,700	1,192.91			
1935	248	4,000	1,347.88			
1936	360	4,200	2,037.90	58	4,100	454.36
1937	344	4,300	1,922.03			
1938	200	4,500	1,234.10	112	4,500	1,118.84†
1939	288	4,600	1,785.91			
1940	444	4,900	2,658.12	108	5,000	822.58
1941	479	5,200	3,294.45			
1942	548	5,400	3,909.79	208	5,500	1,775.72‡
1943	535	5,500	3,652.56			
1944	470	5,800	3,350.40			
	144	5,900	1,215.22‡			
1945	536	6,400	4,502.84			
1946	960	6,700	8,149.90	143	6,900	2,035.71
1947	781	7,700	8,140.79			
1948	591	8,500	8,701.41	345	7,700	6,948.07‡
1949	537	9,500	7,844.50			

* This is the year of publication and pertains to the meeting of the preceding year. The figures are published in the subsequent year.

† "Who's who" volumes.

‡ Part of papers presented at annual meeting published as supplement to June number.

EXHIBIT II
MEMBERS AND SUBSCRIBERS

Class of Membership	11/30/48	Added	Removed	Gain or Loss	Totals 11/30/49
Annual	5,293	896*	435†	461	5,754
Junior	448	548‡	308§	240	688
Family	91	32**	12	20	111
Complimentary	26	6	7	1	25††
Life	27	9	—	9	36
Honorary	17	—	—	—	17
	5,902	1,491	762	729	6,631
Subscribers	2,448	568	530	38	2,486
Complimentary	13	6	1	5	18
Totals	8,363	2,065	1,293	772	9,135

* Includes 138 junior members changed to annual.

† Resigned 101; nonpayment 202; died 22; lack of address 45; changed to junior 62; changed to family 3.

‡ Includes 62 annual members changed to juniors.

§ Includes 138 juniors changed to annual.

** Includes 3 annual members changed to family.

†† Includes 7 who do not receive publications.

REPORT OF THE TREASURER OF THE ASSOCIATION FOR THE YEAR ENDING NOVEMBER 30, 1949

The following table shows the sources of income and the major items of expenditure, both administrative and publications. Operating results for the current fiscal year are compared with those of last year and five years ago. This setup differs from that found in the Auditor's Report in that all sources of income and of expenditures are grouped together whereas the Auditor's Report isolates the publication results by deducting publication income from publication expense. Details may be found in the income and expense statements and balance sheet exhibits in the Auditor's Reports.

Comparative Results of Operations for 1949, 1948, and 1945

<i>Income</i>	11/30/49	11/30/48	12/11/45
Membership dues	\$31,121	\$28,003	\$20,260
Subscriptions	12,254	11,831	8,456
Sales	1,863	1,417	1,056
Advertising	7,775	6,829	1,652
Directory income (net)	1,410	161	—
Republications income	1,000	1,000	—
Dues and publications income	\$55,423	\$49,241	\$31,424
Interest	\$ 1,117	\$ 1,195	\$ 1,480
Dividends	3,170	2,944	2,489
Less custodian fees	126	128	107
Sale of securities (net)	48	1,887	2,161
Investments (less fees)	\$ 4,209	\$ 5,898	\$ 6,024
Total income	\$59,632	\$55,139	\$37,448
<i>Expenses</i>			
Office salaries	\$11,637	\$10,167	\$ 5,603
Other administrative expenses	3,275	3,237	1,522
Annual meeting	470	1,434	1,498
Executive Committee	1,700	1,124	699
Other committee expense	864	1,148	320
Administrative and operating	\$17,006	\$17,110	\$ 9,642
Review printing	\$20,165	\$19,046	\$10,588
Papers and Proceedings printing	7,845*	8,701	4,502
Directory printing	—	7,300*	—
Editorial office (Review)			
Contributors	1,667	1,775	1,668
Editorial and clerical salaries	7,243	6,444	5,800
Other expenses	756	566	331
Publications	\$37,676	\$43,833	\$22,889
Total expenses	\$54,682	\$60,943	\$32,537
Net operating income or deficit ...	\$ 4,950	\$ 5,804	\$ 4,916
Appropriations		600	7,500
Deficit		\$ 6,404	\$ 2,584

* Estimate exceeded cost by \$351, which necessitated revising \$7,845 to \$8,196.

Total income for the fiscal year ending November 30, 1949, amounted to \$59,632, or \$4,493 more than in 1948. The chief items accounting for this result were dues, subscriptions, and publication income, including *Directory* sales (the cost of which was incurred in the previous year). Although salaries and wages and the printing costs of an increasingly large edition of our publications have augmented expenses, the total expenses of \$54,682 were \$5,261 less than the \$60,943 figure for 1948. The most obvious item explaining this result is the \$7,300 figure for *Directory* printing (the actual cost figure proved to be \$6,948, which is less than estimated). This is not an annual expense and does not appear in the 1949 column.

Printing costs in the "*Proceedings and Handbook*" account carried at \$7,845 need to be revised to \$8,196 to allow for the \$351 difference between the estimate of \$7,300 and the actual *Directory* cost of \$6,948. Net income for 1949 amounts to \$4,950 compared to last year's deficit of \$5,804 (or \$6,404 if appropriations are included). No additional appropriations were made during the year. The increased magnitude of our operations becomes evident by comparing the current figures with those of five years ago. Item by item, comparison shows that we have kept proportions well in hand.

Committee Appropriations. Over the past four years the Executive Committee has made appropriations to implement the work of several committees. Appropriations, amounts expended, and balances unexpended are analyzed in the following table:

Committee	Amount Previously Appropriated	Amount Expended Previously	Amount Expended During Year	Balance Unexpended 11/30/49
Survey of Economics	\$ 7,700	\$ 7,888	\$ —	\$ —
	+ 188			
Research	1,500	838	148	513
Teaching	2,000	1,000	200	800
Public Issues	1,500	475	461	563
Foreign Aid	100			
Contributions from mem- bers	1,212	80	1,232	—
	<u>\$14,200</u>	<u>\$10,282</u>	<u>\$2,041</u>	<u>\$1,876</u>

Financial Condition. Condensed balance sheets for this year, last year, and five years ago are compared below.

Assets	11/30/49	11/30/48	12/11/45
Cash on deposit and on hand	\$ 7,456	\$ 7,279	\$ 4,510
Receivables (net)	3,422	3,136	1,201
Prepaid expenses (inventories)	779	286	345
Furniture and fixtures (net)	675	398	437
Investments at cost—			
Bonds	33,109	33,109	36,706
Stocks	48,427	48,624	44,956
	<u>\$93,869</u>	<u>\$92,833</u>	<u>\$88,155</u>

<i>Liabilities and Surplus</i>		
Withheld tax	\$ —	\$ 122
Accounts payable	6,080	13,705
Allied Social Science Associations	829	829
Deferred income	16,366	11,415
Membership extension fund	1,088	1,213
Fund for proposed secretariat	35	35
Committee appropriations (not expended)	1,877	3,892
Life memberships	4,325	3,525
Surplus—		
Balance at beginning of period	\$58,219	\$64,523
Transfers from life memberships	100	100
Net income or loss for period	4,950	6,404
Unappropriated surplus	\$63,269	\$58,219
Total footings	\$93,869	\$92,833
		\$68,349
		250
		2,584
		\$66,014
		\$88,155

Asset items call for no special comment. Our cash increases as dues and subscription bills are paid at year-end and is drawn upon as current expenses are met. Receivables represent advertising in the December number and unpaid dues and sales. Prepaid expenses are chiefly insurance policies and supplies. Investments are carried at cost and not market.

Our liabilities consist chiefly of printers' bills, which usually include the December number of the *Review* and in 1948 the *Directory*, deferred income and life memberships, which represent prepaid membership dues and subscriptions, and the membership extension fund. This latter item represents the amount remaining of an original \$3,000 or \$4,000 fund raised after World War I by a special finance committee for the purpose of financing a membership drive. Unexpended appropriations are also carried as a liability. Deducting these liabilities from total assets gives us the item, unappropriated surplus, which represents a backlog of resources upon which we can draw when current income fails to cover current expenses. The history of the net annual income or deficit since 1909 and the growth of the accumulated surplus of which the investment portfolio is an important part may be found in the Treasurer's Report for the year 1944 in the *Proceedings* of May, 1945, pages 272-277.

The surplus figure reached a high of over \$69,000 in 1946; then declined to \$68,200 in 1948. This year with a net income instead of a deficit we have built the surplus up to \$63,269 and with \$6.00 dues going into effect, the period of net losses should prove to be over unless, of course, new and extraordinary expenditures are incurred. The increase in dues is a modest one and should not markedly affect the tempo of our membership growth despite the fact that many of the allied associations have made substantial increases in their dues.

The Treasurer wishes on behalf of the Association to express our appreciation and thanks to Messrs. Roy C. Osgood and Charles C. Wells for their continued valuable service as members of the Finance Committee.

Respectfully submitted,
JAMES WASHINGTON BELL, *Treasurer*

INVESTMENT PORTFOLIO

Year	At Par	Cost			Market
	Bonds	Bonds	Stocks	Total	Stocks and Bonds
1925	\$25,000	\$24,661.75		\$24,661.75	
1926	27,000	26,623.25		26,623.25	
1927	29,000	28,688.45		28,688.45	
1928	29,000	28,633.45		28,633.45	
1929	31,000	30,569.48		30,569.48	
1930	31,000	32,439.48		32,439.48	\$32,635.40
1931	39,500	39,134.48		39,134.48	32,307.44
1932	40,500	41,134.48		41,134.48	33,239.70
1933	33,500	32,962.48	\$ 3,954.23	36,916.71	31,522.50
1934	31,500	30,989.48	3,954.23	34,943.71	34,714.00
1935	16,000	15,280.48	28,114.50	43,394.98	50,338.72
1936	17,000	16,260.13	33,712.57	49,972.70	62,991.00
1937	20,000	19,160.91	37,399.20	56,560.11	52,064.75
1938	22,000	20,180.95	38,302.20	58,483.15	58,598.88
1939	22,000	20,039.57	41,155.95	61,195.52	61,529.38
1940	25,000	22,519.80	41,155.95	63,675.75	60,553.88
1941	25,000	22,439.81	41,155.95	63,595.76	58,606.11
1942	27,000	24,651.12	41,556.06	66,207.18	58,211.88
1943	28,000	23,822.54	40,071.31	63,893.85	66,012.12
1944	30,000	25,731.51	46,033.81	71,765.32	81,844.01
1945	40,000	36,705.95	44,955.81	81,661.76	103,574.76
1946	40,000	37,964.08	47,422.89	85,386.97	93,682.61
1947	40,000	37,964.08	48,755.67	86,719.75	95,398.25
1948	35,000	33,108.63	48,624.14	81,732.77	84,841.91
1949	35,000	33,108.63	48,426.69	81,535.32	89,196.86

RETURN ON INVESTMENTS

Year	Bonds	Stocks	Total	Rate of Return on Cost
1925	\$1,350.00		\$1,350.00*	
1926	1,410.00		1,410.00*	
1927	1,524.70		1,524.70†	
1928	1,642.77		1,642.77†	
1929	1,575.44		1,575.44†	
1930	1,695.21		1,695.21	5.22%
1931	1,886.81		1,886.81	4.82
1932	2,014.36		2,014.36	4.89
1933	1,679.49	\$ 108.57	1,788.06	4.84
1934	1,593.13	218.07	1,811.20	5.18
1935	1,022.96	680.70	1,703.66	3.92
1936	801.77	1,597.63	2,399.40	5.00
1937	884.87	2,689.62	3,574.49	6.31
1938	928.04	2,063.02	2,991.06	5.11
1939	978.79	1,781.52	2,760.31	4.51
1940	1,037.56	2,182.46	3,220.02	5.06
1941	1,088.97	2,497.35	3,586.32	5.64
1942	1,306.49	2,186.17	3,492.66	5.28
1943	1,133.97	2,094.47	3,228.44	4.90
1944	992.67	2,410.57	3,403.24	4.60
1945	1,479.99	2,488.85	3,968.84	4.71
1946	1,213.65	2,441.13	3,654.78	4.30
1947	1,227.31	2,909.85	4,137.16	4.77
1948	1,194.85	2,944.31	4,139.16	5.06
1949	1,117.50	3,169.73	4,287.23	5.26

* Estimated income for year.

† Certificate of deposit interest included.

REPORT OF THE FINANCE COMMITTEE

The following summary compares the status of our investment holdings this year and last on the basis of cost and market values.

	INVESTMENT ACCOUNT			
	Cost of Holdings		Market Value	
	12/7/48	11/30/49	12/7/48	11/30/49
Bonds	\$33,109	\$33,109	\$31,083	\$30,381
Stocks	48,624	48,427	53,759	58,815
	<u>\$81,733</u>	<u>\$81,536</u>	<u>\$84,842</u>	<u>\$89,196</u>

The only change in the investment account was the receipt of a stock dividend of 2 shares of Glidden Company, making the total 118 shares. Houston Lighting and Power, Gulf Oil Corporation, and Liggett and Myers Tobacco Company rights received during the year were sold.

No stated meetings are held by this Committee, since its members are in constant telephonic communication with one another. We have, however, held four meetings, at which our investment holdings were reviewed. We have had no new money to invest and the cash position of the Association has not been such as to warrant buying on short term. We are holding governments which we plan to liquidate when cash needs require. A shift from rail to public utility bonds was considered but no action was taken. Changes in holdings of government securities could improve yields but we prefer at this time to hold the marketable issues.

Respectfully submitted,

ROY C. OSGOOD, *Chairman*

CHARLES C. WELLS

JAMES WASHINGTON BELL

LIST OF SECURITIES HELD BY THE ASSOCIATION

		BONDS		
Amount	Issue	Cost	Value Market or Last Sale 11/30/49	
\$3,000	Chicago and Northwestern Ry. 4½% 2nd Mortgage Bonds due 1999	\$ 2,431.50	\$ 1,402.50	
3,000	Illinois Central Ry. St. Louis Div. 3% due 1951	2,212.50	3,015.00	
3,000	New York Central Ry. 4½% Ref. and Imp. Series "A" due 2013	2,437.50	1,702.50	
5,000	New York, New Haven and Hartford Ry. Co. 1st and Ref. Mtge. "A" 4% due 2007	4,755.00	3,118.75	
1,000	Pennsylvania Ry. Co. 4¼% Gen. Mortgage Series "D" due 1981	986.50	846.25	
1,000	Pere Marquette Railway Co. 3¾% 1st Mortgage due 1980	1,000.00	1,000.00	
1,000	Reading Co. 3¾% 1st and Refunding Series D due 1995 ..	1,010.00	916.25	
3,000	U. S. Defense Bonds, Series "V" 2½% due 1954	3,000.00	2,883.00	
8,000	U. S. Treasury Bonds 2½% due 6-15-72/67	8,000.00	8,265.00	
7,000	U. S. Treasury Bonds 2½% due 12-15-72/67	7,275.63	7,231.87	
		<u>\$33,108.63</u>	<u>\$30,381.12</u>	

Stocks

Number of Shares of Common Stocks		Issue	Cost	Value Market or Last Sale 11/30/49
25	Chesapeake and Ohio Railway Co.		\$ 1,309.07	\$ 687.50
55	Commonwealth Edison Co.		1,525.51	1,595.00
50	General American Transportation Corp.		3,084.30	2,331.25
100	General Electric Co.		2,738.19	4,000.00
50	General Motors Corp.		2,057.47	3,318.75
118	Glidden Company		1,635.72	2,728.75
62	Gulf Oil Corp.		3,714.97	3,968.00
100	Houston Lighting and Power Co.		3,153.48	4,750.00
100	Kroger Company		3,703.47	5,750.00
25	Liggett and Myers Tobacco Co.		1,869.23	2,143.75
50	Link Belt Co.		2,524.15	3,093.75
50	Monsanto Chemical Co.		3,120.74	2,668.75
10	National Dairy Products Corp.		310.85	376.25
25	J. C. Penney Co.		370.13	1,328.12
50	Procter and Gamble Co.		2,459.72	4,000.00
80	Standard Oil Co. of Indiana		3,329.47	3,540.00
75	Union Carbide and Carbon Corp.		1,433.94	3,140.62
100	Wayne Pump Company		3,114.65	1,700.00
Numbers of Shares of Preferred Stocks				
25	Crane Company 3½% Cumulative Pfd.		2,550.00	2,550.00
14	Glidden Company		735.00	714.00
25	International Harvester Co.		3,686.63	4,431.25
Total stocks			\$48,426.69	\$58,815.74
Total bonds			33,108.63	30,381.12
			<u>\$81,732.77</u>	<u>\$89,196.86</u>

REPORT OF THE AUDITOR

December 15, 1949

*Executive Committee,
American Economic Association,
Evanston, Illinois.*

DEAR SIRs:

In accordance with instructions we have examined the accounts and related records of the American Economic Association for the year ended November 30, 1949, and now submit our report thereon together with the following exhibits:

Balance Sheet—November 30, 1949 Exhibit 1

Statement of Income and Expenses
for year ended November 30, 1949 Exhibit 2

Results from Operations

Net income for the year ended November 30, 1949, was \$4,950 compared with a loss for the period ended November 30, 1948, of \$6,404 as shown in the following summary:

Particulars	Dec. 7, 1947 to Nov. 30, 1948	Year Ended Nov. 30, 1949	Increase Decrease
Income:			
Dues	\$28,003	\$31,121	\$ 3,118
Interest and dividends (net)	4,011	4,161	150
Profit on sales of securities	1,887	48	1,839
Republication income	1,000	1,000	—
Total income	<u>\$34,901</u>	<u>\$36,330</u>	<u>\$ 1,429</u>
Expenses:			
Administrative and other operating expenses ..	\$17,110	\$17,006	\$ 104
Publication expenses	43,833	37,676	6,157
Publication income	20,238	23,302	3,064
Total expenses	<u>\$40,705</u>	<u>\$31,380</u>	<u>\$ 9,325</u>
Net operating income or loss	<u>\$ 5,804</u>	<u>\$ 4,950</u>	<u>\$10,754</u>
Appropriations for special committees	600	—	600
Net income or loss	<u>\$ 6,404</u>	<u>\$ 4,950</u>	<u>\$11,354</u>

The increase in dues reflects the increase in membership during the period under review, as reported by the Secretary:

Classification	Number of Members	
	Nov. 30, 1948	Nov. 30, 1949
Regular	5,293	5,754
Junior	448	688
Family	91	111
Life	27	36
Honorary	17	17
Complimentary	26	25
Totals	<u>5,902</u>	<u>6,631</u>

Interest on bonds owned was accounted for in accordance with stated rates; dividends received on stocks were compared with amounts reported in published records of dividends paid. Stock rights costing \$197 were sold for \$245.

Net publication expense, as shown in the following summary, amounted to \$14,374 for the current period compared with \$23,595 for the preceding period:

Particulars	Dec. 7, 1947 to Nov. 30, 1948	Year Ended Nov. 30, 1949	Budgetary Estimates for Calendar Year 1949
Expenses:			
Printing of—			
<i>Review</i>	\$19,046	\$20,165	\$18,600
<i>Proceedings</i>	8,701	7,845	—
<i>Directory</i>	7,300	—	—
Editor's honorarium	2,459	2,500	2,500
Payments to contributors	1,775	1,667	1,750
Editorial clerical salaries	3,985	4,743	5,100
Editorial supplies and expenses	567	661	500
Sundry publication expenses	1	95	—
Total expenses	<u>\$43,834</u>	<u>\$37,676</u>	
Less—Income:			
Subscriptions, other than members	\$11,831	\$12,254	
Sales of copies	1,417	1,863	
Advertising	6,830	7,775	
<i>Directory</i> income	161	1,410	
Total income	<u>\$20,239</u>	<u>\$23,302</u>	
Net publication expense	<u>\$23,595</u>	<u>\$14,374</u>	

The December, 1949, issue of the *Review* had not been printed at the time of our examination. The publishers of the *Review* estimated the expense of printing 9,800 copies at \$5,450 and this amount is included in the costs above.

Changes during the year ended November 30, 1949, in Committee Funds Appropriated (not expended) are analyzed below:

Fund	Unexpended Balance Nov. 30, 1948	Contributions During Year	Less— Expense During Year	Unexpended Balance Nov. 30, 1949
Committee on Research	\$ 661.58	\$ —	\$ 148.09	\$ 513.49
Committee on Undergraduate Teaching of Economics and Training of Economists	1,000.00	—	200.00	800.00
Committee on Public Issues	1,023.76	—	460.72	563.04
Committee on Aid to Foreign Scholars	1,206.88	25.00	1,231.88	—
Totals	<u>\$3,892.22</u>	<u>\$25.00</u>	<u>\$2,040.69</u>	<u>\$1,876.53</u>

Financial Condition

Condensed balance sheets of the Association at November 30, 1948, and 1949 are compared below:

Assets	November 30		Increase Decrease
	1948	1949	
Cash on deposit and on hand	\$ 7,279	\$ 7,456	\$ 177
Receivables, net	3,136	3,422	286
Inventory of <i>Economic Essays</i> —at nominal value	1	1	—
Prepaid expenses	286	779	493
Furniture and fixtures, net	398	675	277
Investments at cost—			
Bonds	33,109	33,109	—
Stocks	48,624	48,427	197
	<u>\$92,833</u>	<u>\$93,869</u>	<u>\$1,036</u>
Liabilities and Surplus			
Accounts payable	\$13,705	\$ 6,080	\$7,625
Allied Social Science Associations	829	829	—
Deferred income	11,415	16,366	4,951
Membership extension fund	1,213	1,088	125
Fund for proposed secretariat	35	35	—
Committee funds appropriated (not expended)	3,892	1,877	2,015
Life memberships	3,525	4,325	800
Surplus—			
Balance at beginning of period	64,523	58,219	6,304
Net income or loss for period	6,404	4,950	11,354
Transfers from life memberships	100	100	—
	<u>\$92,833</u>	<u>\$93,869</u>	<u>\$ 1,036</u>

Cash on deposit was satisfactorily reconciled with balances confirmed directly to us by the depositories.

The receivables of the Association were not confirmed by correspondence with debtors. Based upon the Association's past experience, the reserve for doubtful accounts appears to be adequate to cover normal losses.

The only change in the investment account was the sale of stock rights received during the year. Proceeds were accounted for.

Securities held were confirmed directly to us by the State Bank and Trust Company of Evanston, Illinois, custodian for the Association.

Insofar as we were able to ascertain, all liabilities of the Association at November 30, 1949, are reflected in the accompanying balance sheet and the Secretary has represented to us that to the best of his knowledge all liabilities are disclosed.

We wish to take this opportunity to express our appreciation of the courtesies and co-operation extended to our representatives during the course of the examination.

Very truly yours,

DAVID HIMMELBLAU AND CO.
Certified Public Accountants

EXHIBIT 1

AMERICAN ECONOMIC ASSOCIATION

BALANCE SHEET—NOVEMBER 30, 1949

<i>Assets</i>		<i>Liabilities, Funds and Surplus</i>	
CURRENT ASSETS:		CURRENT LIABILITIES:	
Cash on deposit and on hand—		Accounts payable	\$ 6,079.48
State Bank and Trust Company, Evanston \$ 4,880.54		Allied Social Science Associations	829.44
National Bank of Commerce of Chicago .. 2,541.75		Total current liabilities	\$ 6,908.92
Petty cash	25.00		
Receivables—		DEFERRED INCOME:	
Review advertising	\$ 2,250.90	Prepaid subscriptions	\$ 4,935.10
Interest accrued on bonds	448.33	Prepaid dues	11,431.34
Publication sales	346.76		16,366.44
Membership dues	432.50		
Sundry	194.10	MEMBERSHIP EXTENSION FUND	1,088.46
Total receivables	\$ 3,672.59	FUND FOR PROPOSED PERMANENT SECRETARIAT	35.00
Less—Reserve for doubtful accounts	250.93	COMMITTEE FUNDS APPROPRIATED (not expended)	1,876.53
Inventory of "Economic Essays"—at nominal value	1.00	LIFE MEMBERSHIPS AND SURPLUS:	
Inventory of stamps and envelopes	354.12	Life memberships	\$ 4,325.00
Unexpired insurance	425.39	Unappropriated Surplus—	
Total current assets	\$11,658.46	Balance November 30, 1948	\$58,218.85
		Life membership transfer	100.00
INVESTMENTS (at cost):			\$58,318.85
Bonds	\$33,108.63	Net income for year ended No-	
Stocks	48,426.69	vember 30, 1949 (Exhibit 2) ..	4,950.00
			63,268.85
FURNITURE AND FIXTURES (less reserve for depreciation) ..	675.42	Total liabilities, funds and surplus	\$93,869.20
Total assets	\$93,869.20		

AUDITOR'S CERTIFICATE

*Executive Committee
American Economic Association:*

We have examined the balance sheet of American Economic Association as of November 30, 1949, and the related statement of income for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records, and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statement of income present fairly the financial position of American Economic Association at November 30, 1949, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

December 15, 1949
Chicago, Illinois

DAVID HIMMELBAU Co.
Certified Public Accountants

EXHIBIT 2

AMERICAN ECONOMIC ASSOCIATION
STATEMENT OF INCOME AND EXPENSES
FOR YEAR ENDED NOVEMBER 30, 1949

Particulars	Amount	
INCOME:		
Dues—		
Regular, junior and family members	\$30,681.31	\$
Subscribing and contributing members	440.00	31,121.31
Investments—		
Interest and dividends:		
Interest on bonds	\$ 1,117.50	
Dividends	3,169.73	
	\$ 4,287.23	
Less—Custodian fees	126.04	\$ 4,161.19
Gain on sales of stock rights (net)	47.95	4,209.14
Republication income		1,000.00
Total income		\$36,330.45
EXPENSES:		
Administrative and other operating expenses—		
Secretary's salary	\$ 2,500.00	
Office salaries	9,137.44	
Annual meeting (net)	470.46	
Executive committee expenses	1,699.62	
Other committee expenses	863.67	
Walker and Clark medals	473.20	
Postage expense	730.07	
Stationery and supplies	750.32	
Insurance	178.80	
President's expense	250.00	
Provision for depreciation	95.30	
Telephone and telegraph	123.04	
American Council of Learned Societies—dues and expense	216.31	
Exchange on checks	137.14	
Miscellaneous	321.96	\$17,006.41
Publication expenses—		
Printing of:		
Review	\$20,165.48	
Proceedings	7,844.50	
Editor's honorarium	2,500.00	
Payments to contributors	1,666.75	
Editorial clerical salaries	4,742.72	
Editorial supplies and expense	660.73	
Sundry publishing expense	95.44	
Total publishing expenses	\$37,675.62	
Less—Publication income:		
Subscriptions, other than members ..	\$12,253.78	
Sales of copies	1,863.12	
Advertising	7,774.68	
Directory income	1,410.00	23,301.58
		14,374.04
Total expenses		31,380.45
Net income for year ended November 30, 1949 (Exhibit 1)		\$ 4,950.00

REPORT OF THE MANAGING EDITOR FOR THE YEAR ENDING DECEMBER, 1949

As I look over the contents of the *Review* for the past year, I have much the same impression as in other recent years that on the whole a very creditable level of performance has been maintained, but falling short of what might have been hoped, especially in the matter of articles of outstanding merit and distinction. The articles reveal active concern with important subjects and able treatment of them.

With respect to subject matter, analysis reveals a possibly undue concentration on three major fields; namely, international affairs, fiscal and monetary affairs, and monopoly problems. There is undoubtedly a strong current interest in these fields among economists, and it is certainly the case that the articles have had to fight their way into print in competition with all other manuscripts received. Nevertheless, it is important that the contents of the *Review* should reflect the very wide range of interests of its readers, and I should perhaps take more pains than I have done to see that this purpose is fulfilled.

Manuscripts continued to roll in during 1949 at almost exactly the same rate as in the preceding year. The total number received was 200, as compared with 205 in 1948. Of these 144 were of a length and character appropriate to leading articles and 56 to communications. The distribution is quite different from the figures given in last year's report, mainly because of a change of practice by which even quite short original contributions are printed among the articles rather than the communications. A statistical summary of the contents of the *Review* in 1949 with corresponding figures for 1948 is presented below, omitting the advertising pages and exclusive of the *Proceedings*.

	1949		1948	
	No.	Pages	No.	Pages
Leading articles	29	471	26	460
Communications	24	72	22	96
Book reviews	144	320	114	290
Memorials	3	24	—	—
Classified list of new books	—	60	—	60
Classified list of periodical articles	—	36	—	34
Classified list of dissertations	—	34	—	27
Notes	—	37	—	53
		1,054		1,020

For the year, the total number of pages was 34 more than in 1948 and 54 pages more than the estimated 1,000 upon which publication estimates were based. Articles, communications, and book reviews were contributed by 188 persons as compared with 149 in 1948.

In my report of a year ago I raised the question of a possible saving of space through cutting down the number of items published in the bibliographical lists. The policy which was decided upon was given publicity in a note in the December, 1949, issue as follows:

In preparing the bibliography for the Periodicals department of the *Review*, there always exists an insoluble problem of where to draw the line. For domestic publications the problem is not particularly serious. The listings are mainly from the technical journals

of economics and other social sciences, but also include many gleaned, not too systematically, from other sources. Editorial efforts are now being made to reduce the latter to more systematic coverage, drawing the line against the too ephemeral and those too far on the fringe of economists' interest.

The case of foreign listings, however, is more baffling. After the war, without any particular plan, more and more listings were gradually made from the renascent economic and related journals, even those in the less well-known languages, and from the numerous Latin American journals. This produced a large number of entries either of dubious value or accessible to only a few readers.

We have come to the conclusion that the *Review* could without serious disadvantage to its readers cut down rather sharply on entries from these sources, and in particular from journals in the more esoteric languages. This policy is based in large part upon the valuable service being rendered by the *Economic Journal* (London) in publishing the table of contents of most of the European and some other foreign language economic journals. We assume that most American scholars interested in economic articles published in Scandinavian, Dutch, Polish, Czech and other journals have access to the *Economic Journal* and can secure their bibliographical guidance from that source. The addresses of most of the journals can be found in the 1948 *Directory* of the American Economic Association, beginning at page 337.

The *Review* will continue its comprehensive listing of articles in the English-language journals and a somewhat more selective listing from journals in the more widely known European languages.

While speaking of bibliography, a word may be said about the Titles of New Books department of the *Review*. A rather extensive inquiry was made among readers of the *Review* to find out whether we might not save space by listing fewer relatively ephemeral or unimportant items, especially in the pamphlet field. It appeared, however, that many specialists desired to have such material called to their attention. The policy in this respect will therefore remain unchanged.

One outstanding bibliographical improvement is in process of being introduced. Heretofore, I have never found an adequate means of assuring that all government publications of interest to economists would come to my attention for inclusion in the listings. The Legislative Reference Bureau of the Library of Congress has now developed a comprehensive check list for its own purposes and has extended to the *Review* the aid of a staff member to arrange the items in convenient manner for our purposes. With this there should also come an improvement of coverage of government publications in the review department.

Expenditures in 1949 exceeded those in 1948 by \$2,269. Of this, \$1,000 is accounted for by an increase in the salary of the editorial assistant, the remainder by the larger number of copies printed and the somewhat larger size of the volume in about equal proportions.

The actual cost for 1949 exceeded the budget estimate by \$1,486. For all items except the cost of printing and mailing actual costs were under the budget estimate by \$259. Thus, the excess of printing and mailing costs over the budget estimate was \$1,745. Of this amount slightly more than one-half was due to the larger number of copies printed. The remainder was due to the fact that 54 pages of textual material were published in excess of the estimated 1,000 pages for the volume. I must confess my chagrin at each year somewhat exceeding the budgeted costs which could be kept under control by the editor. This year there were certain exigencies which I need not detail. But always the great pressure of manuscript received upon the space of the *Review* creates the temptation to slip a little over the budgeted space limit. Even so, the extra revenues derived from the increased number of copies printed greatly exceeds the amount of extra cost due to letting the volume run over 1,000 pages.

The following table presents the actual expenditures in 1949 in comparison with the estimated budget and with actual expenditures in 1948.

	Budget 1949	Actual 1949	Actual 1948
Printing and mailing	\$18,600.00	\$20,344.38*	\$18,822.40
Editorial	2,500.00	2,500.00	2,500.00
Editorial assistant	5,100.00	4,896.91	4,078.35
Supplies	500.00	528.22	491.73
Contributors	1,750.00	1,666.75	1,774.75
	<u>\$28,450.00</u>	<u>\$29,936.26</u>	<u>\$27,667.23</u>

* Cost of December number estimated.

The number of copies printed rose from 9,100 copies in December, 1948, to 9,800 copies in December, 1949. The estimated costs for the coming year presented below are based upon the latter number. Since the number of copies has been steadily rising, the estimated cost is a minimum which will be exceeded to the extent that the printings continue to increase. The number of copies printed and the cost of printing are shown by quarters in the following table.

	Copies Printed	Net Pages	Gross Pages	Cost*
March	9,300	259	304	\$4,868.24
June	9,500	256	296	4,869.08
September	9,700	281	320	5,437.06
December	9,800	258	312	5,170.00†

* After deducting cost of reprints sold.

† Estimated.

As in the past the proposed budget for 1950 is based on an annual volume of 1,000 pages net of advertising and upon present costs and present size of printings. This budget is \$1,300 above the budget for 1949 but about \$200 below the actual cost for 1949.

The recommended budget for 1950 is presented below.

Printing (paper, postage, reprints, etc.)	\$20,000
Editor's salary	2,500
Editorial assistance	5,000
Supplies	500
Contributors	1,750
	<u>\$29,750</u>

During the year 18 complimentary subscriptions were added to the 13 already outstanding. This includes those provided by the Committee on Aid to Foreign Scholars as well as those added by me under the authorization provided by the Executive Committee some years ago. The list of foreign exchanges, which has swelled to over 100, is now undergoing review to determine whether it should be reduced. After the war I had what I think was a proper bent under the circumstances to be generous in making exchanges with not strictly economic and not strictly scientific journals, because of the great desire of foreign groups to receive the *Review* for which they had not the funds to pay. How far it is now proper to reverse this policy is the subject under examination.

With the present year, my third full term as managing editor comes to a close. In a separate document I am presenting to the Executive Committee a few thoughts with respect both to its policies upon the succession and to my personal position.

The terms of R. A. Gordon and Arthur Smithies as members of the Board of Editors expire at the end of 1949 and it will be necessary for the Committee to appoint successors. The continuing members are G. J. Stigler, F. H. Harbison, R. A. Musgrave, and W. H. Nicholls. To all of these, and particularly to the retiring members, I wish to express my appreciation of their competent and faithful services.

During the year the George Washington University has continued to extend the *Review* the courtesy of providing an office in its Hall of Government.

Respectfully submitted,

PAUL T. HOMAN, *Managing Editor*

REPORT OF THE COMMITTEE ON REPUBLICATIONS

Sales of the first three volumes of reprinted articles published by The Blakiston Company under contract with the Association continue to indicate that these volumes are serving a useful function for the profession. During the period from October 1, 1948, to October 31, 1949, sales of Volume I, *Readings in the Social Control of Industry*, were 950 copies; Volume II, *Readings in Business Cycle Theory*, 2,063 copies; and Volume III, *Readings in the Theory of Income Distribution*, 1,083 copies. Since their respective dates of publication (July, 1942, January, 1944, and August, 1946), the three volumes have now had sales of 4,669, 7,502, and 6,080 copies, respectively.

Volume IV, *Readings in the Theory of International Trade*, edited by Howard S. Ellis and Lloyd A. Metzler, was published February 9, 1949. Between that date and October 31, 1949, sales of this volume were 3,237 copies.

Although according to the terms of the contract with the publishers no final settlement is to be made until all copies of a given volume have been sold, the publishers have again this year offered to advance to the Association one thousand dollars against future earnings. This brings the total of such advances to three thousand dollars. In addition to being of considerable service to members of the Association, the publication of these volumes is also turning out to be a source of revenue.

Members of the Association will also be interested to learn that The Blakiston Company has recently entered into an arrangement with an English publishing house for the reissue of the first four volumes for sale in England and on the Continent.

Three further volumes are in process of preparation. The volume on monetary theory, edited by Friederich A. Lutz and Lloyd W. Mints, should appear by January, 1951. The volume on price theory, edited by K. E. Boulding and G. J. Stigler, and the volume on public finance and fiscal policy, edited by Roy Blough and Arthur Smithies, are expected to be published later in the same year.

In the meantime, the Committee has under consideration the question as to the area which should be chosen for the eighth volume of the series. It is hoped that this decision will be reached, and work begun on this volume before the end of 1950. Members of the Committee will welcome the suggestions of those interested in the series.

Respectfully submitted,
BERNARD F. HALEY, *Chairman*
JAMES WASHINGTON BELL
FRIEDRICH A. LUTZ

COMMITTEE ON THE UNDERGRADUATE TEACHING OF ECONOMICS AND THE TRAINING OF ECONOMISTS

At this time last year, we reported to the Executive Committee our hope that we might have a series of reports, covering almost all aspects of our work, ready for publication before the end of 1949. While this hope has not been realized, enough has been accomplished to make us confident that all or most of our reports will be in publishable order within the next few months, and that they can be in the hands of members of the Association by next fall.

This is intended, therefore, to be the last of our annual interim or progress reports to the Executive Committee. For this reason, the present report, instead of dealing only with the activities of the past year, will reflect the general character of the work that has been done, the policies that have been pursued and the conclusions that have been reached during the five years of the Committee's existence. These matters will be presented under three headings: (1) the Subcommittees; (2) the Committee; (3) Recommendations to the Executive Committee.

The Subcommittees

There follows a list of subjects studied by our several subcommittees, and summaries of their respective activities:

1. Elementary Courses in Economics

This Subcommittee has issued a series of three complimentary questionnaires, has carried on much discussion and correspondence, and has accumulated, we believe, a larger knowledge of prevailing methods and practices in such courses than ever was gathered before. Its report is not yet completed, but we believe that it will be in our editorial hands by next March or April.

2. Interdepartmental Introductory Courses in the Social Sciences

The work of this Subcommittee has been greatly advanced during the past year. Under the guidance of J. Lawrence Phalan, secretary of the Committee, additional information and new approaches have been gained through the circulation of new questionnaires, a large volume of correspondence, and much study of prevailing practice and experience. The first draft of a full report was completed by this group in October.

3. The Undergraduate Economics Curriculum and Related Areas of Study

A revised report by the Subcommittee was submitted by its Chairman, Mabel Newcomer, about two years ago. The report has been approved by members of our Panel of Consultants, but will be returned to the Subcommittee for its final consideration before being published.

4. The Training of Teachers of Economics

This Subcommittee has conducted three lengthy conferences on the teaching of economics, has prepared memoranda and compiled suggestions as to methods of conducting such conferences, and has actively aided in the organization of local and regional conferences. An article by its chairman, Arnold

Tolles, "Conference on the Teaching of Economics," appeared in *American Economic Review* of December, 1946. Early in its career, this group decided that its energies could best be used in conducting and instigating conferences of this kind. It was believed that a comprehensive study of the training of teachers of economics would have to concern itself with the complicated business of our graduate schools, and would necessarily be coextensive with the whole subject of graduate instruction in economics. For these reasons the Subcommittee preferred to submit a quite limited report. A proposed way of securing a larger study of this subject is included among the recommendations at the end of this report.

5. *The Study of Economics in Schools of Business*

Dean Howard R. Bowen, Chairman of this Subcommittee, achieved an effective division of labor within his group. Much useful material was gathered, and some interesting tests of findings were employed. A completed report was submitted last spring, and some basic editorial questions have been adjusted by correspondence between Dean Bowen and the Chairman of this Committee.

6. *Undergraduate Economics in Preparation for Careers in Public Service and in Business Administration*

The excellent work and interesting findings of this Subcommittee were described in our report for 1948. Ben Lewis, Chairman of the group, plans to have a report ready for the Committee's editorial handling by next spring.

7. *Treatment of Especially Able Students of Economics*

Chairman Amy Hewes submitted a report for this group in the summer of 1946. It is in order for publication but will be returned to the Subcommittee for any revision that the passage of time may seem to make desirable. This passage of time has become embarrassing to the Committee in the case of this report and that of Miss Newcomer's group.

8. *Economics Teaching in the Schools*

This has been outstandingly the toughest of our several Subcommittee assignments. Our thought in setting up this project was simply that it would be helpful to teachers of undergraduate economics if they were better informed about their students' backgrounds, as these backgrounds are affected by study of economic matters in elementary and secondary schools. We conceived it, that is to say, as a simple exploratory job. As we followed it up, however, and as the Subcommittee began its explorations, it became increasingly clear that the task was not simple but did indeed involve complications with which the resources of this Committee were inadequate to deal. Because of this, we reported to the Executive Committee that this Subcommittee would not be able to prepare a report along the lines indicated but would continue to study the dimensions and complexities of general education in economics as carried on in the schools.

The first complication encountered was that economic matters, as treated in the schools, are so entwined with other matters, which are geographical, historical, and political, as to make their separation for study by our Subcommit-

tee unfruitful. We knew something of this when we planned this Subcommittee and its work, but we later found that the extent and the degree of this intertwining greatly surpassed our preliminary expectations.

The second complication was even more troublesome. It was that the officials and teachers who have to do with instruction along economic lines in the schools were not content with any idea of ours that we might "explore" their work; they have demanded that we actively help them make their educational efforts more effective. The concern they feel about their work is a phenomenon of the "grassroots," and is a fundamental form of a concern that is growing in higher and more official circles. It is simply that a large proportion—perhaps most—of our young people are gaining neither an adequate understanding nor a sufficient appreciation of what traditionally is called our "liberal economy." Some small part of this feeling may be due to a fear of infiltration of "reds" into our educational system; another small part may arise from the distaste of some conservative people for any attitude save that of "uncritical acquiescence" toward our traditional institutions; but most of it appears to arise among independent and sincere men who set store by effectiveness in general education. The chairman of this Committee and the Chairman of our Subcommittee have attended numerous conferences held by the National Council for the Social Studies, the Educational Policies Commission of the National Educational Association, and the United States Commissioner of Education, at which the concern described above gave the meetings their dominant tone.

This Committee and our Subcommittee have tried to be of help in this situation. Early in our work we established a close liaison with the National Council for the Social Studies, the agency of the National Education Association which seeks to direct and improve general educational work in our field. A preliminary survey indicated that the achievements, limitations, and needs in this area could be learned only through study on a scale coextensive with the entire range of what are called "the social studies." The Council for the Social Studies offered to undertake such a study—contingent on some foundation support—under the auspices and direction of our Association and others in the social science fields. As a necessary preliminary to such a move, we recommended to the Executive Committee, at its meeting in Cleveland in January, 1946, that our Association join our colleagues of the American Political Science Association, the American Historical Society, and other professional bodies as an organizational member of the National Council for the Social Studies. This recommendation was voted down by the Executive Committee. Further reference will be made to this matter at a later point in this report.

More recently, a second attempt on a broad and formal basis to be of some aid to general education was made by our Subcommittee. It was a plan to secure from this Committee's Panel of Consultants a consensus of opinion as to what economic matters should be stressed in the schools, and as to what specialists among the Association's members should outline and document the several areas to be treated. A description of this plan, then in "project" form, was submitted as an annex to our report of last year. Our consultants did their part of the projected work, as did also the experts to whom the several

economic areas were referred. The result is a monument to scholarly penetration and analytical finesse, and our Subcommittee is working on it in an attempt to render it appropriate and useful for teachers in schools. The Subcommittee also has joined with the National Council for the Social Studies in sponsoring and conducting a recent conference in Baltimore on general education in social questions.

This is one of the phases of our work in which our relations with other organizations have been especially close. Our secretary, J. Lawrence Phalan, and the secretary of our opposite number committee of the American Political Science Association are closely associated in the new Division of Higher Education of the United States Office of Education, where they have worked together both in this field and in that of interdepartmental courses in the social sciences.

We believe that conditions prevailing in general education in economics warrant official concern and action by our Association. One index of the situation that may interest the Executive Committee has recently come to light. Dr. Phalan, in a study of eighty publicly supported teacher-training institutions, in which almost three hundred people give courses in the social sciences and business, found that only ten of these teachers are members of the American Economic Association.

9. The Study of Economics in Relation to Education in Agriculture

This Subcommittee has accumulated a large amount of material through questionnaires and by other means. It is believed that a report will be ready for our editing by spring.

10. The Study of Economics in Relation to Education in the Professions

The work of this Subcommittee has fallen into four quite separate parts, relating to professional training in engineering, law, medicine, and social work, and the members of the Subcommittee have been specialists in these several fields of education. Each has worked on a report with the aid of professional colleagues. The entire work is completed and the reports in hand. *The Journal of Legal Education* has requested, and received, permission to publish the paper on economics in legal education prepared by Eugene Rostow, of Yale.

11. The Use of Visual and Other Devices in Teaching Economics

This Subcommittee has studied its subject exhaustively and has submitted a revised version of its report. One of its achievements has been the preparation of what is, to this time, the most comprehensive inventory of commercially available visual aids in economics. The Committee for Economic Development expressed interest in this list, and was given fifty copies with the compliments of the American Economic Association.

The Committee

This Committee has been in existence for five years. Our understanding from the beginning has been that we were not expected to work under high pressure but to serve as an organizing medium for activities for improving education in economics.

We have organized and worked with our eleven subcommittees. We have served as a clearing house for information related to organization and methods in collegiate teaching of economics and have carried on many personal conferences and a sizable volume of correspondence to this end. We have tried to encourage writing about the teaching of economics and have received from colleagues a number of interesting memoranda on this subject. As of this moment, we will have organized and conducted two round tables on the teaching of economics at annual meetings of the Association. We have offered our auspices and co-operation to several regional and local conferences on the teaching of economics. We have established liaison with various official and unofficial bodies with interests similar to our own.

We have in view one further act: the publication of our series of reports. The reports of our subcommittees are solid, workmanlike jobs. To add some needed spirit and zest to our offering we have asked one of our consultants, John Maurice Clark, to prepare an essay on values to be served in education in economics, to be published in our volume of reports. Mr. Clark has agreed to do this.

Our request to be permitted to publish our reports as a supplement to the *American Economic Review* was approved by the Executive Committee at Cleveland in 1946. In case approval by the present Executive Committee is needed, we have included this matter among our recommendations. It is our hope that our reports may be studied by our colleagues throughout the country, and may serve as a basis for many departmental discussions of their educational work.

Recommendations

We recommend:

1. That we be authorized to publish our reports in the way described.
2. That a standing committee on education in economics, to carry on general activities similar to those of this Committee and any others that the proposed committee or the Executive Committee may deem desirable, be established.
3. That a committee be appointed to study and report on graduate training in economics, the report to consider both the development of scholarly techniques and capacities and the development of competent teachers.
4. That the American Economic Association become an associational affiliate of the National Council for the Social Studies.
5. That a committee be appointed to explore conditions of study and teaching of economics in the schools, and that this committee work as closely as possible with the National Council for the Social Studies and the United States Office of Education.

For the committee,
HORACE TAYLOR, *Chairman*

REPORT OF THE COMMITTEE ON AID TO FOREIGN SCHOLARS

The Committee on Aid to Foreign Scholars has completed its work and submits the following report of its activities.

In response to the request for assistance made to members of the Association for money, books, and journals, the sum of \$1,311.03 (August 10, 1949) and more than 2,000 books and journals were received. The money was spent entirely for books published during the war period, since these appeared to be the greatest need.

Because of the recent publication of most of these, comparatively few could be found in the remainder and secondhand markets, but publishers' discounts of 20 per cent were obtained in most cases, and in one instance the Committee received a generous donation of new publications with slightly damaged bindings (from Harper & Bros.). While more volumes could have been purchased if only secondhand and remainders had been purchased, it is believed that the smaller number of new works will prove more valuable to the recipients.

An attempt was made to meet specific requests, but it soon became apparent that many of the economists were so completely out of touch with developments in this country that they did not know what to ask for. Back files of journals were sent mainly to universities whose libraries had been destroyed or damaged.

Expenses of the Committee were met by an appropriation of \$100.00 from the A.E.A. and other funds given to the Committee for that specific purpose.

The total number of books and journals distributed exceeded 2,500. They were distributed to universities and research institutes in Austria, Belgium, France, Germany, Great Britain, and the Netherlands. The specific institutions in Austria, Belgium, Germany, and the Netherlands are:

Austria: Oesterreiches Institut für Wirtschaftsforschung
Universität Innsbruck

Belgium: Université Catholique de Louvain

Germany: Universität Bonn
Bank Deutscher Länder
Johann Wolfgang Goethe Universität
Universität Munster
Finanzwissenschaftliche Forschungsinstitut
Universität Heidelberg
Universität München
Universität Köln

Netherlands: University of Amsterdam

For France and Great Britain the Committee worked with committees of those countries who agreed to redistribute them.

Attempts were made to contact institutions in other countries—particularly Italy—where the need particularly appeared to be great, but although letters were written to a number of individuals no response was received.

As a by-product of the work of the Committee it was possible to meet re-

quests from individuals in this country for names and addresses of scholars needing assistance in the form of food and clothing.

The Committee believes that its work has been particularly valuable in re-establishing contacts between American and European scholars, and it wishes to thank all those members of the A.E.A. who have co-operated with gifts of money, books, and journals.

Respectfully submitted,

MABEL NEWCOMER, *Chairman*

HERBERT VON BECKERATH

CALVIN BRYCE HOOVER

HORACE TAYLOR

REPORT OF THE COMMITTEE ON INTERNATIONAL CO-OPERATION: THE I.E.A.

You will recall that the question as to whether the A.E.A. should take a hand in the organization of and eventually join the I.E.A. was discussed at the meeting of the Executive Committee in Cleveland in December, 1948, and then more thoroughly at the meeting in Princeton in April, 1949.

The minutes of the Princeton meeting with reference to the discussion of the I.E.A. reads as follows:

International Co-operation. A draft of a proposed constitution for an International Economic Association, prepared by Professor Mossé, was reviewed paragraph by paragraph, and after some discussion it was VOTED that Professor Haberler be authorized to attend the forthcoming conference in Paris on April 5-6 and to express the sentiments of the Executive Committee as being in favor of a small, modest beginning in organizing an international association, preferably on the basis of national associations, that the relation to UNESCO be strictly financial, that we are much concerned about the selection of an executive secretary of high quality, and, finally, that we would approve financial support if called upon to an amount not to exceed \$500 toward meeting organizational expenses.

On April 4, 5, and 6, 1949, I attended a meeting of the Preparatory Committee on the I.E.A. at the headquarters of UNESCO in Paris. My report on this meeting, together with the draft for the statutes of the I.E.A., was circulated among the members of the special committee and a little later among all members of the Executive Committee of the A.E.A. The members of the Executive Committee were asked to express their opinion as to whether or not the A.E.A. should join the I.E.A. The special committee was unanimously of the opinion that the A.E.A. should join.

The following members of the Executive Committee wrote to me to the effect that they were in favor of the A.E.A. joining the I.E.A.: J. W. Bell, A. F. Burns, H. S. Ellis, B. F. Haley, J. A. Schumpeter, T. W. Schultz, and P. A. Samuelson.

I did not receive any reactions from the other members of the Executive Committee.

On July 15-16, 1949, I attended the first meeting of the Interim Executive Committee of the I.E.A. in Paris. A copy of the minutes of that meeting, as well as a copy of the revised draft for the statutes of the I.E.A., has been submitted as a part of the present report.¹

It will be seen from the attached minutes¹ that the Interim Executive Committee of the I.E.A. decided to proceed with the organization of the I.E.A. To that effect, the following steps were taken:

1. In accordance with the Interim Arrangements provided in the Draft Statutes, the Interim Committee nominated Professor Schumpeter as President, M. Rueff as Vice President, and Ronald Walker (Australia) as Treasurer of the I.E.A. These nominations will have to be confirmed by the Council at its first meeting.

2. It was decided to call the first meeting of the Council for early September, 1950. In order to spend as little time and money as possible on purely

¹ A note describing the plans for the I.E.A., together with the preliminary draft of the statutes, appears in the March, 1950, issue of the *American Economic Review*.

organizational matters, it was decided to hold at the same time a small round table conference on the subject of "Long-range Economic Problems of International Balances." Mr. Austin Robinson (Secretary of the Royal Economic Society) was asked to draw up a detailed program for that meeting. He was in the United States in September, 1949, and had conferences with H. S. Ellis, J. Schumpeter, G. Haberler, and others. The program of that conference will be ready soon.

It should be added that this particular subject for the round table conference was chosen because it was thought that it was a subject on which a conference could be organized at fairly short notice. It was felt that for most other subjects it would take a much longer time to organize a well-prepared meeting.

3. Dr. Helene Berger-Lieser was appointed as part-time secretary. Dr. Berger-Lieser is an economist who works at the O.E.E.C. (Organization for European Economic Co-operation) in Paris. She has considerable experience, speaks English, French, German, and Italian, and is well known to several members of the Interim Committee. A small office will be opened at one of the economic institutes in Paris.

4. The Interim Committee discussed the Draft Statutes and made a number of changes and amplifications. A copy of the amplified Statutes is appended to the attached minutes.¹ It will be seen that the earlier draft which had been discussed by the Executive Committee of the A.E.A. at its Princeton meeting has not been materially changed.

It will be recalled that the Executive Committee was of the opinion that in order to keep the I.E.A. on a modest scale it should be a federation of national associations and should not have individual members. This principle has been fully preserved.

It will be necessary, however, to draw up more detailed bylaws. The Secretary was asked to prepare a draft which will be laid before the Council at its first meeting. These are the most important decisions taken by the Interim Committee. For further details see attached minutes.¹

Financial Arrangements

The I.E.A. will receive some financial aid from UNESCO. It is not yet quite certain how much it will be, but I was told that a sum between \$10,000 and \$15,000 will be made available for the purpose of organizing the contemplated conference next September. It is hoped but not yet certain that it will be possible to pay travel expenses of the main participants and contributors.

The only financial obligation of the A.E.A. will be to pay its annual dues of \$200, if the Executive Committee definitely decides to adhere.

I have learned, however, that the associations of some of the smaller countries find their dues (\$100) a little burdensome. It may, therefore, become necessary to make some adjustments.

Decisions to Be Taken by the Executive Committee of the A.E.A. at Its Next Meeting

The Secretary of the I.E.A. will send out invitations to the various national associations to join the I.E.A.

The Royal Economic Society, the economic associations of the Scandinavian countries and the Low Countries have indicated their willingness to adhere. It is expected that the Canadian and Australian economic associations will join. France has no national association but it is hoped that a French National Economic Association or at least an *ad hoc* committee of French economists will be formed in the near future. The same is true of Italy and Austria. The German Economic Association (called the Verein für Sozialpolitik) which had dissolved itself on the advent of Hitler has been reconstituted and will undoubtedly join the I.E.A.

The A.E.A. will soon receive an official invitation to join the I.E.A. and to appoint four delegates to the Council.

In view of the discussions which took place during the last two meetings of the Executive Committee and the fact that the proposed structure of the I.E.A. corresponds to the requirements laid down in the resolution adopted at the Princeton meeting, the A.E.A. will presumably wish to participate. It will, however, be necessary to discuss thoroughly whether we are satisfied with all the details of the proposed arrangements.

Respectfully submitted,

GOTTFRIED HABERLER, *Chairman*

REPORT OF OUR REPRESENTATIVE ON THE AMERICAN COUNCIL OF LEARNED SOCIETIES

The Council held its annual meeting at the Claridge Hotel, Atlantic City, New Jersey, January 27-28, 1949. This meeting had been preceded as usual by a Conference of Secretaries of the Constituent Societies on January 26-27. Under the reorganization plan adopted by the Council in 1947, few decisions were made by the Council itself; responsibility for policies and programs of action rests with the Board of Directors. The business of the annual meeting in 1949 consisted chiefly of general reports and discussion of problems or topics connected with humanistic interests. Among other topics discussed were the recruitment of personnel, the Fulbright program, the affairs of the International Union of Academies, and the present position and prospects of humanities in this country. Dr. Charles E. Odegaard, the new Director of the Council, spoke especially on this last topic.

In view of the fact that the terms of all delegates of the constituent societies expire in 1950 and that new delegates will then have to be appointed, some attention was given to the criteria to be considered by constituent societies in appointing delegates to the Council.

The relation between this Council and the A.E.A. raises questions and is difficult to report on very briefly. It contrasts sharply with the S.S.R.C. in not undertaking many "projects" which are of great direct interest to economists. It is, of course, primarily an organization to serve the humanities. But the organization is interested in having the social sciences continue their connection and is very cordial to their representatives. Further, as was pointed out in the report of a committee of the A.E.A. in 1941, of which I was chairman, most of the social "disciplines" have two more or less distinct aspects—one scientific or quasi-scientific and the other humanistic. The S.S.R.C. is interested chiefly in the former. What impresses me is that this second aspect is something which it is quite difficult to do much about in a tangible way. I feel that the major "service" of the A.C.L.S. to the A.E.A. is through its conference of secretaries, in which our Secretary, Professor James W. Bell, has taken a prominent, if not the leading, part in recent years. However, the Council has been making a substantial investment in two areas which are of equal concern to social sciences and humanities. I refer to a study of publication, particularly with special reference to small issues, being conducted by Mr. H. M. Silver, and a study of personnel with reference to all disciplines represented, carried on by Mr. J. F. Wellemeyer. I have had some conference with both of these gentlemen and I am most favorably impressed with them.

The matter of how to use organization, or money, to promote the interests of humanistic disciplines, literary or social, is a very hard problem. The activities of the Council in the humanistic fields, narrowly conceived, have little direct relation to actual creative work itself. They deal with problems of "research" which is practically all history in a broad sense of the term, with teaching, and with personnel in these activities. The Council also grants some aid to publication.

The Council also does very important work in the field of relations between

the government and scholarly activities. This has been particularly true in United States relations with Latin America. At the moment, the main instrumentality for administering the Fulbright funds and program is the Conference Board of Research Councils, in which the A.C.L.S. and the S.S.R.C. both participate, along with the N.C.E. (education) and National Research Council.

Respectfully submitted,

FRANK H. KNIGHT

REPORT OF REPRESENTATIVE ON THE SOCIAL SCIENCE RESEARCH COUNCIL

The Board of Directors of the Social Science Research Council met in the spring and in the fall of 1949 and reviewed the Council's activities. Council activities of particular interest to economists include its sponsorship of research in the following areas: agricultural marketing; labor markets; housing; measurement of opinion, attitudes, and consumer wants; world area research; international relations; economic history; economic growth; and social implications of atomic energy and technological change. In these several areas Council committees have progressed varying degrees in exploring, promoting, or organizing research.

The Committee on Agricultural Marketing is preparing a critique of research on agricultural marketing. The Committee on Labor Market Research has sponsored a conference on labor-management relations and a conference on research and training in industrial relations. It has prepared a half-dozen reports dealing with the several aspects of labor market research, including a survey of research programs in the field of labor. The Committee on Housing Research has sponsored regional conferences on housing, presented papers before the several professional societies, advised those engaged in housing research, and prepared memoranda on various aspects of housing problems. The Committee on Measurement of Opinion, Attitudes, and Consumer Wants is sponsoring three projects: a study of sampling methodology, on which a final report is nearing completion; a study of isolation, measurement, and control of interviewer effects, to be completed in 1950; and a study of the use of panels, on which drafts of three reports dealing with special aspects of the problem have been prepared. Because this Committee is interested in the problem of standardizing consumer products, it seems essential that it add an economist to its membership.

The Committee on World Areas Research is concerned with research on geographic areas and with graduate training programs. It has recommended that a second national conference on world areas (the first was held in 1947) be held in 1950 and that a survey of research and graduate training programs be made. The year-old Committee on International Relations has been concerned with methodological shortcomings of research in this area and has conducted a number of conferences at various research centers to discuss interwar experience and "merging trends" in international relations research. In my judgment the work of this Committee will suffer if it does not give greater attention to economic factors in international relations than its preliminary work suggests that it will. That it is aware of this danger, however, is reflected in its having added an economist to its membership.

The Committee on Economic History, while continuing its recently inaugurated practice of aiding individual scholars on specific research projects on the economic history of the Western Hemisphere, is broadening its program to extend aid to projects dealing with any geographical area and to sponsor localized research groups. The Committee on Economic Growth is exploring

the possibilities of empirical research on long-run changes in the magnitude and structure of large social units such as nations and geographical regions.

The work of the Committee on the Social Implications of Atomic Energy and Technological Change stems from that of an earlier Committee on the Social Aspects of Atomic Energy, established in 1945, under whose auspices several substantial studies were completed. This represents one of the Council's most significant explorations in economic and social research. The Committee is interested in the whole problem of technological change—how it comes about and what are its effects. Yale Brozen worked full time during the spring and summer under the Committee's auspices canvassing the literature, current research, and personnel. He has completed a preliminary study appraising the present state of knowledge and theory on the economics of technological change. The Council's project also calls for a survey of research which government agencies are conducting. The Council hopes that out of the project may develop better methods of analyzing problems of social change. It recognizes the need for more refined work at the theoretical level, more comprehensive marshaling of facts, and closer co-operation between economists and engineers and between university research workers and government agencies.

The Council continues its long-established pre- and postdoctoral research fellowship programs and its grants-in-aid program. In addition, it is offering pre- and postdoctoral area research fellowships and research travel grants to mature scholars who are specialists on the contemporary culture of major world areas outside of North America.

Recognizing that increased teaching loads, the failure of institutional budgets and academic salaries to keep pace with rising living costs, and increased competition from nonacademic agencies are handicapping research in the social sciences, the Council plans to inaugurate, if it obtains adequate funds, a new postdoctoral fellowship program. The program is designed to recognize and aid young social scientists of exceptional promise and encourage academic institutions to provide more adequately for self-directed research by junior faculty members. Under this program, the Council plans to pay approximately half the salary of appointees for three years and provide each with a thousand dollars annual expense money if an appointee's institution will relieve him of half his teaching load and pay half his salary. Request for information on its fellowship programs should be addressed to the Council at 220 Park Avenue, New York City.

In view of the increasing complexity of the problem of people's living together in peace and plenty and of the repeated acknowledgement by professional educators and philanthropic foundations of an especial need for pushing back the boundaries of ignorance in the social sciences, data presented to the Council by John W. Riley, Jr. (in his memorandum on the "Status of the Social Sciences") and by Elbridge Sibley (in his study of the support of independent research done by individual scholars) comparing fellowship and research aid given to natural scientists and to social scientists are of great interest. Riley finds that eight out of ten specific fellowship awards at privately-endowed and state-supported colleges go to students of the natural sciences,

that university expenditures on the natural sciences are twice as high as on the social sciences, and that the natural scientists have lighter teaching loads and larger research budgets. Sibley's study shows that of the total aid received by individual research scholars in the colleges of arts of sixteen universities surveyed, 30 per cent came from the universities, 21 per cent from government military agencies, 20 per cent from other government agencies, 22 per cent from philanthropic foundations, and 7 per cent from industrial and commercial sources. Virtually all of the aid from military sources and most of the aid from nonmilitary government agencies and from industrial and commercial sources went to natural scientists. Even philanthropic institutions gave more to scholars in the natural sciences than to scholars in the social sciences.

In view of the growing tendency to regard research as a mass production, group enterprise, Sibley's recognition of the importance of helping individual research workers is refreshing. As he points out, "unless opportunities for untrammelled initiative in research are kept open," research may grow more sterile as it becomes more efficient.

Respectfully submitted,

GEORGE W. STOCKING

REPORT OF OUR REPRESENTATIVE ON THE BOARD OF DIRECTORS OF THE NATIONAL BUREAU OF ECONOMIC RESEARCH

The National Bureau published two books and three occasional papers in 1949. Four reports were in press at the end of the year.

The total of studies nearly completed or well under way of which publication is contemplated within two or three years is thirty-two. These are divided among fields as shown below.

Business cycles	10
Income and flow of money	3
Employment and productivity	3
Labor and wages	2
Urban real estate finance	3
Agricultural finance	3
Corporate finance	5
Public finance	3

Arthur F. Burns is editing and preparing for publication Wesley Mitchell's unfinished manuscript, "What Happens During Business Cycles—a Progress Report."

Ten new studies were launched or planned in 1949 divided among fields as shown below.

Business cycles	3
Real estate finance	1
Agricultural finance	1
Public finance	2
International economic relations	2
Demand for capital funds	1

Milton Friedman began his investigation of the cyclical behavior of the money supply and associated changes in American banking since the Civil War. Rutledge Vining is preparing a report on regional variations in business conditions in the United States. Lawrence Klein is making a study of the factors that account for differences in investment by different railroads, with a view to utilizing this information in an econometric model directed towards variations in investment over time.

An outgrowth of Klein's study of investment is his projected investigation of consumer spending. The Institute for Social Research, University of Michigan, invited the National Bureau to co-operate in arranging to have survey materials compiled by the Institute utilized for economic analysis. Klein expects to use these data to determine factors explaining differences in consumption expenditures of different families and to test how well these factors explain variations in consumer spending over time.

F. F. Hill and R. J. Saulnier began a study of the development and present status of agricultural credit institutions. Wolfgang Stolper is working on an investigation of economic fluctuations in urban real estate finance.

Two new fiscal studies were started in 1949. One is an investigation by

Daniel Holland of Columbia University entitled, "The Corporation Income Tax as a Personal Tax"; and the other is an investigation by George E. Lent, Associate Professor of Economics at the University of North Carolina, entitled, "The Economic Effects of Tax Exempt Securities."

Solomon Fabricant formulated plans for a study of foreign trade of the United States and for a systematic restatement of the data in our international balance of payments; and a study of "The Declining Quality of American Foreign Investment, 1920-30" by Ilse Mintz was added in the international field.

The study of the demand for capital funds will be directed to three principal questions: (1) What has been the past course of capital requirements in this country and what factors have determined it? (2) From what sources have our capital requirements been financed, and what factors have determined the use of—and choice among—sources of funds? (3) What is the current and the probable future course of capital requirements and their financing?

A memorial volume to Wesley C. Mitchell is in preparation. It will include sections on his life and work, early appraisals, recent appraisals, and a bibliography.

The resurrection and reorganization of the Universities-National Bureau Committee was completed by the beginning of 1950. The number of universities having membership on the Committee has been increased to about thirty. Criteria of eligibility are the extent of research and the existence of graduate training leading to the Ph.D.

The Universities-National Bureau Committee began in 1948 a series of special conferences on different topics, designed to summarize the present state of knowledge of the topic and to outline problems that require further investigation. A conference on the economic growth of nations was held on November 26 and 27, 1948, and the prepared papers have been mimeographed and bound in 1949 for limited distribution in a volume entitled, *Problems in the Study of Economic Growth*. The second special conference, on research in business cycles, was held November 25-27, 1949, and a third, on research in finance, is planned for June, 1950.

The Conference on Research in Income and Wealth was active in the organization and work of the International Association for Research in Income and Wealth. It assumed responsibility for preparing for the Association an annotated bibliography of United States literature in the field of income and wealth, to form part of an international bibliographical service being developed by the Association. The National Bureau served as fiscal agent for the Association, provided facilities for the secretariat of the Association in 1948 and 1949, and contributed the services of members of its staff, Simon Kuznets and Daniel Creamer, the chairman and secretary of the Association, respectively.

The Conference on Research in Fiscal Policy has been replaced by the Committee on Fiscal Research. The main function of the new Committee is to advise the National Bureau on the scope and content of its investigations in public finance. Lawrence H. Seltzer has been appointed chairman of this

Committee which is to consist of the present members of the Conference on Research in Fiscal Policy. Mr. Seltzer has also been appointed a member of the research staff of the National Bureau for three years to assume general responsibility for development of the National Bureau's research program in the field of public finance.

In 1930 the National Bureau inaugurated a plan of appointing promising young men or women holding university positions as Research Associates for one year. The plan was in operation from 1930 to 1932 and from 1938 to 1942. No appointments were made between 1932 and 1938 because of financial stringency, and the plan was suspended in 1942 because of the war. The twenty-two Research Associates appointed under the plan up to 1942 came from sixteen American colleges and universities and two foreign universities.

A new beginning was made in 1948 by appointing Rutledge Vining, Professor of Economics at the University of Virginia, and Lawrence R. Klein Research Associates for the academic year 1948-49. In 1949 Daniel M. Holland, of Columbia University, and George E. Lent, Assistant Professor of Economics at the University of North Carolina, were appointed Research Associates for the academic year 1949-50. The appointment of Klein was continued for 1949-50 in co-operation with the Institute for Social Research, University of Michigan.

Members of the Association may make suggestions relative to the work of the National Bureau either directly or through the undersigned who is a member of the Board of the Bureau by appointment of the Association.

Respectfully submitted,

DONALD H. WALLACE

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