

POSTWAR ECONOMIC STUDIES

No. 1, August 1945

JOBS, PRODUCTION, AND
LIVING STANDARDS

E. A. GOLDENWEISER

EVERETT E. HAGEN

FRANK R. GARFIELD

BOARD OF GOVERNORS
OF THE FEDERAL RESERVE SYSTEM
WASHINGTON

Published August 1945

COMPOSED AND PRINTED AT THE
WAVERLY PRESS, INC.
BALTIMORE, U. S. A.

CONTENTS

	PAGE
PREFACE.....	Inside Front Cover
JOB.....	E. A. GOLDENWEISER 1
Introduction.....	1
Immediate Danger of Inflation.....	3
Nature and Magnitude of Problem of Full Employment.....	4
Program.....	6
Farm Income.....	7
Labor Income.....	8
Business Income.....	8
Foreign Trade.....	9
Public Works.....	10
Guarantee of Employment.....	10
Minimum Standard.....	11
Social Security.....	13
Taxation of Individuals.....	14
Interest Rates.....	14
Banking.....	15
Financing Small Business.....	15
Monetary Policies.....	15
Budget and Public Debt.....	15
Formulation of Economic Policies.....	16
OUTPUT AND DEMAND AFTER THE WAR	
	EVERETT E. HAGEN 18
Introduction.....	18
The Transition.....	20
VJ-Day, the Major Shock.....	21
The Final Phase of Reconversion.....	23
Prices during the Transition.....	29
After the Transition: The Period of Deferred Demand.....	31
Full Employment Level of Output.....	31
Demand in the Post-Transition Year.....	32
Government Demand.....	32
Consumer Demand.....	32
Deferred Demand.....	35
Housing, Business Inventories, and Exports.....	36
Business Investment.....	36

CONTENTS

	PAGE
OUTPUT AND DEMAND AFTER THE WAR (<i>Cont.</i>)	
Relation of Potential Demand to Output at Full Employment.	39
Employment after Deferred Demand Has Run Its Course.	43
How Great Is Potential Demand?	44
The Protective Coloration of Unemployment.	48
Summary.	49
MARKETS AND LIVING STANDARDS. FRANK R. GARFIELD	50
Summary.	50
Potential Higher Living Standards.	56
Potential 60 or 70 per cent Rise in Living Standards.	56
Corresponding Rise in Production and Living Standards.	58
Five Goals.	60
Background Data on Markets and Living Standards.	63
Policies on Minimum Living Standards.	69
Need for Special Policies on Minimum Standards.	69
Special Policies Already in Effect.	72
Ways to Increase Family Incomes and to Reduce Living Costs.	73
General Policies.	74
Variety of Views.	75
Policies to Increase Consumption.	78

J O B S

by

E. A. GOLDENWEISER

Economic Adviser, Board of Governors

“Full productive employment in a free society is possible but it is not possible without taking pains.”

Sir William Beveridge.

Underlying this essay, and in fact the entire series of studies which it introduces, is the thought that society should function for the benefit of the individuals who compose it. Full employment at adequate pay has been chosen as the central theme because jobs are the main channel through which national welfare reaches the individual. If everyone able and willing to work is employed and in a position to maintain or raise his living standard, such global concepts as national product, national income, and total expenditures will take care of themselves. These concepts are necessary measuring tools in estimating whether the national output is adequate to provide for the needs of individuals, but they are not objectives in themselves. The individual is not a mere infinitesimal fraction of society and his welfare is not an average derived from the national aggregate by division; on the contrary the welfare of society is the sum of the well-being of the individuals who compose it.

This approach results in changes in emphasis in connection with appraisals of economic conditions. At numerous points practical programs of action would be the same, whether the analysis started with the individual or with society as a whole, but the inadequacy of some of the more extreme general proposals for action would become apparent if they were subjected to the test of their impact on the individual.

The struggle between a philosophy imbued with the worth of the individual and the dignity of man and a philosophy based on the pre-eminent importance of the State, to which the individual and his interests must be subordinated, is the essence of the conflict between totalitarianism and dictatorship on the one hand and free enterprise and democracy on the other. This series of studies is written from the viewpoint of the importance of the individual, freedom, and democracy as against the preeminence of State, regimentation, and dictatorship. It is

believed that the proposals in this and the following studies can be achieved without sacrificing any of the essential freedoms of the individual—in fact, that the achievement of these objectives is the only way by which a free society of individuals can be successfully maintained over the years.

Government influence over the affairs of the individual has inevitably increased as we have moved into a closer-knit society. The day of *laissez-faire* is over. We have gradually accepted as essential many Government activities and regulations which in the past seemed to be infringements on individual freedom. We do not question health and sanitation measures, child labor laws, social security programs, or regulation of the stock exchanges, and we probably are prepared to accept some form of universal military service. The war has expanded Government participation in economic life and some of this expansion will be permanent. The fact that our public debt is now as large as our total wealth was a few years ago and that the service of this debt, together with even an irreducible minimum of other expenditures of Government, constitutes a substantial fraction of total outlays by the nation, necessitates an increase in the role that Government must play.

What then should be the criterion of the extent to which we are prepared to accept Government participation in our economic life? The test would seem to be that Government should do nothing that can be done for the individual by himself or in voluntary association with others and should leave undone nothing that needs to be done but cannot be done adequately by individual effort. This is a broad criterion that will require much interpretation. And yet it places the emphasis where it should be—not on a textbook definition, but on a practical test. It is believed that the program sketched in this essay at no point interferes with those phases of economic liberty which we value most. It leaves to the individual the choice of occupation and domicile, the choice of the nature of his expenditures on consumption goods and on other goods and services, and the choice between saving and spending and as to timing the two processes over the span of life. It leaves enterprisers free to follow the dictates of the profit motive. It impinges on the free disposal of private income only to the extent necessary to meet public expenditures and it proposes to meet these outlays in a manner best calculated to serve the common interest.

Tax policy is an important part of the Government's general economic policy. Taxation should be so fashioned as to leave as much freedom of

action and as much incentive for private enterprise as possible. A complex and delicate problem—and controversial, but one in the understanding of which great progress has been made under the stress of depression and war. It is now apparent to most students that taxation is not only a means of raising revenue but also the most powerful instrument for influencing the country's economic life that is possessed by Government.

What is contemplated is fuller and better utilization of our resources, human and material, for the benefit of all. This should be the central national economic objective. It is also the objective of the Federal Reserve Board under whose auspices these studies were prepared. At the dedication ceremony of the Federal Reserve Building in 1937 President Roosevelt said: "I dedicate this building to progress toward the ideal of an America in which every worker will be able to provide his family at all times with an ever-rising standard of comfort." It is to the furtherance of this ideal that these studies are devoted.

IMMEDIATE DANGER OF INFLATION

While it is apparent that the gravest long-term problem confronting the nation is how to maintain full employment after the war, the more immediate danger arises from inflationary pressures. So long as Government outlays continue in unprecedented amount and productive effort and manpower are still concentrated on winning the war, there is a serious threat of a runaway rise in prices and of speculation, which would greatly increase the difficulty of building a prosperous economic society after the transition period has passed. Income is increasing, liquid resources of the people are of unheard of magnitude, and deferred demands are accumulating. Meanwhile, the supply of civilian goods is shrinking.

This situation, reinforced by the growing impatience with wartime restraints, results in heavy pressure on the machinery of control. The vital necessity of maintaining safeguards against inflation until the flow of civilian goods can satisfy demand is apparent. Continuance of wage and price controls, of rationing and allocation, as well as of licensing of exports, is a prime condition of a successful transition from a war to a peace economy. It is quite possible that unemployment in some sectors of the economy will develop as war workers are laid off, at the same time that inflationary price advances appear in other sectors. These two evils will not cancel out; both must be prevented. Relaxation of taxes should also be undertaken cautiously with due regard to the danger of releasing income before goods become available. Even more important for the near

future is the orderly and expeditious reconversion of men and machines to peacetime activity as rapidly as war demands permit. The greatest safeguard against inflation is an ample flow of goods. In the long run the large volume of savings held by the people can be a valuable cushion against depression, but in the period of reconversion these savings could be used to feed the flames of inflation—which leads to ultimate collapse and disaster. It is essential to overcome the immediate danger of inflation in order to have a fair chance of maintaining full employment in the post-war period.

NATURE AND MAGNITUDE OF PROBLEM OF FULL EMPLOYMENT

In this paper the concept of full employment goes beyond a mere count of persons who do or do not have jobs. It is conceived as a condition under which every person who is able and willing to work can find enough employment in the course of a year to earn not less than enough to maintain his habitual standard of living. It should be emphasized that this is a conception of full employment as such and has no bearing on the question of improvement in the distribution of wealth, the need for a rising level of national welfare, or for a minimum standard, which are discussed elsewhere. It may be stated here, however, that the habitual standard should in no case fall below the recognized national minimum and should advance with rising productivity. The concept allows for seasonal and so-called frictional unemployment, for its elimination in the near future would be impossible. Steps should be taken to hold such unemployment to a minimum, and any that remains should be covered by unemployment compensation. In the case of farmers the condition corresponding to unemployment is inability to market enough products, or to market them at high enough prices, to maintain their usual standard. Special measures adapted to the needs of farmers will have to be put into effect to protect agriculture from its equivalent of unemployment.

Full employment at adequate pay can be achieved only if our physical and human resources are efficiently employed. What is contemplated is an ever-rising standard of living for all people based on an ever-expanding volume of output.

The problem of maintaining full employment in peacetime will present a most serious and difficult hurdle even if the situation is not complicated by a postwar inflation and deflation. The degree of economic disruption wrought in this country by the war is roughly measurable by the fact that its prosecution has required the expenditure by Government of

100 billion dollars a year for several years. This is a larger amount than total national output in any year prior to 1940. Elimination of most of this war expenditure, and of the employment it gave to those who served in the armed forces or produced war goods, will necessitate an economic readjustment of unprecedented magnitude. This readjustment will require all the resourcefulness, courage, and wisdom of which the nation is capable. It presents a supreme challenge to our economic and political institutions.

The number of persons that will need civilian jobs after the war will be much larger than the number now employed. Some of the people who have been drawn into the armed services or into other employment during the war will want to return to schools and homes, but others will be seeking employment. Reduction of hours of labor to the 1939 level will be only a partial offset to the increase in the labor force. Currently nearly one-half of the economy's total production is purchased by the Government for war purposes. The drastic shrinkage in Government expenditures which will occur in a relatively short period after cessation of hostilities will be the greatest deflationary force our economy has ever had to face. Furthermore, before the war in Europe began, we had 9 millions of unemployed workers. They also must be absorbed before full employment will be achieved.

It has been estimated that in order to have full employment in the year 1950 total national output will have to be about 200 billion dollars at 1944 prices. Should prices rise in the meantime, the money value of total output will have to be higher. An output of 200 billions in terms of 1944 prices represents a great rise from the 1939 level of physical production.

Immediately after the war, output will decline appreciably from the wartime level, with considerable reduction in manufacturing. Such a decline should be expected because working hours will be reduced, some persons will withdraw from the labor force, and in many cases workers will be shifted to jobs where they will produce less in an hour than they did in highly mechanized war work. On the other hand, productivity per man-hour is likely to be greater than it was in prewar years. It is difficult to say how much this increase will be in a year or two years after transition to peacetime production, but it may be expected to be continuous thereafter. As a result, we may expect an increase in what our economy can produce with full employment.

Who will buy all these goods and services? Some will be taken by consumers, some by business enterprises, and some by the Federal, State,

and municipal governments. The total could be variously distributed among these purchasers; the only vital requirement is that the parts add up to the desired amount. What kind of goods and services will be produced? Broadly speaking, there will be goods and services for immediate consumption, there will also be durable products to be used over a period of years, and there will be capital goods. We shall have an opportunity of living better than we ever have in the past, but only if we so manage our economy as to provide markets for a much larger total product than we have ever had in peacetime.

Purchases of all classes of goods and services could and should expand greatly. A rise of 40 or 50 per cent above prewar levels in consumption goods will be possible and necessary. This would mean that people would buy many more cars than they did during the 1930's, many more iceboxes, and several times the amount of some other goods and services. The increase need not all be in quantity of goods—a large part of it could well be in quality. There would be an opportunity to replenish depleted stocks of semi-durable things for daily use, as well as more durable articles. But, even after war deficiencies have been made up, consumption could and should continue on an expanded scale. There would also be a broad field for expansion of all kinds of services. Equally important, there would be need for a large expansion of purchases of capital goods. We could buy as many houses, or the equivalent in better houses, as during the housing boom in the 1920's. We could invest in new plant and equipment as much as in 1941 and at a rate twice as high as in the 1920's. After some years of peacetime economy, further increases in productivity would raise the potential anew and even greater output would come off the assembly lines and would be available for a further advance in our living standards. Resources will be available for this rise in national well-being, but it will require a well-planned and vigorous national public and private business policy to realize this unequalled opportunity. We must not accept the miserable alternative of having our products piling up as surpluses for lack of markets and have their output shrink in consequence. We must not suffer our wealth to be the cause of our poverty, or permit the abundance of our resources to be the basis of our want.

PROGRAM

In framing a comprehensive program for achieving full employment one must venture into many fields in which he is not expert. It is taken for granted that the proposals here outlined will be revised, completed,

and corrected by others more familiar with each field. The only justification for attempting to put all phases of a program into one brief paper is that it is the only way to present a broad and inclusive picture, even though it may be blurred in many of its detailed aspects. Proposals in this program could be grouped in a variety of ways. It is not important which proposal is considered first as long as it is made clear that no proposal in one field can be effective in achieving the desired result, unless there is action on all other vital fronts as well. This is one world, economically as well as geographically.

If there is to be a market for the goods and services that will be produced if employment is maintained, the nation's income must not be permitted to decline materially. In a sense this is circular reasoning: to employ a given number of people we need a national output of a given volume; to have that much production we need a domestic market for the bulk of the output; to have this market we need employment. The circle is complete. It, however, only reflects the essential unity of the economic process. Regardless of the starting point, before completion the analysis must embrace all the essential elements in the process. In this program, income has been taken as the starting point—*income of farmers, workers, business, and professional men.*

Farm Income. In order to maintain farm income the first essential is sustained industrial employment. A strong domestic market is far more important to prosperity for American farmers than any other single factor. Stable exchange conditions and expanding foreign trade, however, are important to the marketing of some of our agricultural products. Plans for improving the dietary standards of the people and for enabling every family to have enough nourishing food to sustain health would help to maintain and stabilize the market for farm products.

In the long run it is apparent that there will have to be a further reduction in the proportion of the population that depends for a living on agriculture. This, however, is an adjustment that will take many years to accomplish. In the meantime, a standard of living in no case below the national minimum should be placed within the reach of all farmers. This will mean that specific measures to provide other sources of income will have to be made available in some farming areas and to some groups of farm workers.

Plans for improving rural housing should go along with plans for making better homes more generally available in towns and cities. Programs for enlarging farm units, for rational diversification of crops, and for

better educational and hygiene services in rural districts should be developed.

The subject of agricultural prices, the desirability of subsidies, and other controversial phases of agricultural policy are left out of this paper because of their complexity. The guiding principle should be maintenance of satisfactory farm income on a sustainable level.

Labor Income. It has been stated that full employment is the prime objective of the proposed program. But employment by itself is not sufficient—it must be employment at useful pursuits and at adequate pay. Maintenance of labor income is a necessary condition of general prosperity and of full utilization of the nation's human and physical resources. Wages should not be permitted to decline from the existing level; on the contrary, advances should be authorized wherever they are justified by an increase in productivity. Increased income arising from more effective production should be distributed among the producers, the owners of the enterprise, and the consumers of the product. Gradual price reductions made possible by technological advances would have a favorable rather than an adverse effect upon the economy.

Hours of labor will no doubt be reduced to the prewar level after hostilities cease, but they should not be reduced further until the country's productivity has reached the point where relaxation of effort will be justified. Reduction of hours on a share-the-work basis is not a sound economic device because it represents a share-the-poverty process out of harmony with a goal of rising prosperity.

Business Income. Opportunities for business profits in the postwar economy are closely bound up with maintenance of the volume of activity. This subject, like many of the others, cuts across a number of the problems discussed in this paper. Suffice it to say that continued opportunity to make reasonable profits is an integral part of any program for sustained economic activity in a system of free individual enterprise.

To encourage active enterprise the Government should pursue a policy of preventing monopolistic practices that curtail output and sustain artificially high prices. Such a policy would have the effect of diminishing the advantages of bigness and encouraging the adjustment of the size of different business undertakings to that best calculated to give the most effective and economical service to the public.

Modification in taxation of business enterprises should be undertaken. Some reduction in personal income taxes should be made as soon as fiscal conditions permit in order to encourage risk taking. For

the same purpose better provision should be made for deductions for losses. Since gains are and should be taxed, there should be equivalent offsets for losses. This applies to individual as well as to corporate taxes. Perhaps consideration should be given to the Swedish plan of reducing taxes for enterprises that undertake construction during periods of business recession. Such a plan might help to keep business activity more stable.

Corporate taxes should be framed principally with a view to falling on corporate income that has not been paid out, that is, on income that does not reach the individual and thus escapes taxation in accordance with the individual income tax schedule. Proper allowance should be made for reserves and for the special needs of new and small business enterprises. There should be some adjustment in the present system of double taxation of corporate profits that are paid out in the form of dividends. Perhaps consideration should be given to adjustment of the taxable incomes of corporations on the basis of dividends paid to stockholders. Equity financing rather than debt financing should be encouraged, both because it diminishes financial rigidity and because it represents a partnership relationship rather than a debtor-creditor condition. Authority to deduct interest on debt from taxable income without corresponding provisions for deducting dividends has the opposite effect.

Foreign Trade. Expansion of balanced foreign trade is a necessary part of a comprehensive economic program for this country. It is important not only because we have a considerable group of industries that depend on foreign markets, but also because it is the most direct way for this country to contribute to satisfactory world conditions, without which lasting prosperity cannot be maintained in the United States.

In the immediate postwar period we may expect a substantial excess of exports, since all the world will need our goods and will have little to sell to us in return. Proper provision for financing foreign trade during this reconstruction period must be made. Ultimately, however, our creditor position requires the development of a commercial and trade policy that will result in imports of foreign goods and utilization of foreign services at least equal to and preferably in excess of the value of our exports. A flexible multilateral mechanism for avoiding unnecessary fluctuations in exchange rates and for sustaining rates of countries that are temporarily under pressure was devised and incorporated in the Bretton Woods Agreements. Establishment of this mechanism will contribute to the effectiveness of the program of full employment and rising national income.

A question may be raised whether it will be possible for this country to maintain higher standards of living than exist in other countries and yet to compete with these countries in world markets. Perhaps one should be reminded that our main interest as a nation is not in having higher standards than other countries; our interest is to have our own standards as high as our resources and our skills permit. If others can match it—so much the better. If standards among our people are based on our ability to produce more efficiently than other countries, there is nothing in foreign competition that needs to put a downward pressure on our economy. On the contrary, our purchases and expenditures abroad, which will be on a large scale if we are prosperous, should exert an upward pressure on living standards throughout the world. Problems arising out of unfair commercial practices by foreign countries and out of other unfavorable competitive conditions must be handled by the authorities that determine our commercial policy.

Public Works. Some public works are a routine part of public house-keeping. Others can be timed so as to support the economy when private activity is declining. Plans can be made to build schools, libraries, hospitals, roads, recreational facilities, and other public utilities in larger volume during business recessions than during periods of expansion. Rehabilitation of blighted urban areas, undertaken largely by private enterprise under the auspices of Federal and local governments, should be included in this group of projects. A shelf of such enterprises with detailed blueprints should be maintained in order to enable the Government to step in promptly if business activity shows signs of slowing down. Distinction should be made between projects that for social or other reasons could not be delayed without damage to the community, and projects which could well be postponed until additional employment is needed. All public works should be on a business basis and wages, hours, and working conditions in such operations should be at standard levels.

Guarantee of Employment. An essential plank in the proposed platform is that the Government should stand ready to give employment to any worker who is unable to find a job elsewhere. A guarantee of employment should be the first clause in a bill of economic rights.

A policy of guaranteeing employment would have great social and psychological value. By sustaining consumption it would also offer resistance to a downward swing of the business cycle. This type of Government employment is not as attractive in many ways, such, for example, as chances for advancement, as work in other fields and there is little

reason to believe that those who are so employed will not continue to look for jobs elsewhere. Such employment should not be on a charity basis, should have no relation to a means test, and should not impinge on the worker's self-respect. This proposal is not a substitute for public works or for unemployment compensation, which should be available to cover periods without work between jobs. Among proposals that the Government take up the slack this suggestion for dealing with marginal employment appears to have the most promise because it is simple, flexible, and aimed directly at the objective of maintaining full employment. It is also a part, perhaps the most essential part, of the concept of a national minimum standard proposed in the next section.

Guaranteed employment would not remove the incentive for effort or hinder the growth of productivity and of national income. It is not necessary to argue here about the possible effects on human endeavor of economic security granted to everyone regardless of his individual efforts. It is obvious that assurance of minimum standards and minimum returns for labor, which is what is proposed, would deter relatively few persons from seeking higher than minimum standards and earnings. The person who will work only long enough and hard enough to fill his belly is surely the exception rather than the rule. What he needs is a process of education that will broaden his wants. Far from diminishing economic incentives, the sustained opportunity and assurance of stability which should flow from the success of the proposed program would result in greater vigor of individual and corporate enterprise and in more concerted and continuous effort alike by employers, wage earners, and independent workers.

Operation of the guarantee program should be flexible. Policies should be adapted to different circumstances, with due regard to local conditions, the capacities of applicants, and the reasons for their lack of employment. The guarantee should be viewed as a last resort which would take care of the residual number of workers who were not able to find jobs even though all the other available methods of providing employment had been put into effect. It should be the policy to reduce to a minimum and ultimately eliminate altogether the need of employing workers under the guarantee. The less it will be necessary to do under the guarantee, the more successful will have been the general economic program.

Minimum Standard. Responsibility of Government for social and economic conditions should include the promotion of measures that would assure to everyone a defined minimum standard of living. While

a country's spiritual civilization is reflected in the highest level to which the genius of its people rises in the arts and sciences, a rock-bottom measure of its economic civilization is the level of comfort and decency below which no one of its people needs to fall.

There exists even now a sort of a minimum in that no one is supposed to starve, or freeze, or be entirely without shelter. But this minimum is far too low in view of our resources. Also, it is a disorganized standard; it varies in accordance with local conditions and depends too much on the attitudes and actions of different individuals and groups of individuals. There should be established a national standard below which no person in this country needs to fall, a minimum of food, of clothing, of shelter, of education, of medical care, and of other elements in real income. This should be the floor of our economic organization. It has been estimated that the resources of the United States in men, machines, and materials are great enough to permit the average standard of living to rise in the next decade to a level 60 or 70 per cent above that prevailing before the war. The minimum standard, which is considerably below the average, should and could be raised considerably more.

It is not possible to enumerate here all that can and should be done to establish a national minimum. We already have a well organized, though not uniformly applied, minimum standard of education, and free library facilities are available to many people. There are much less well-defined standards of hygiene and health. These standards need to be raised and their application made universal.

A recent pamphlet by a group of forward looking Indians presents a plan of economic development for India, in which provision of a minimum for all is taken as a starting point. While the minimum they envisage may seem pitifully low to us, it nevertheless represents a doubling of India's per capita income within a period of 15 years. A 60 or 70 per cent advance for this country is surely not beyond our powers—and it would bring us within reach of the goal of adequate minimum standards for all.

One field in which the establishment of a minimum standard as a national policy could exert a great influence is housing. A program of demolition of slums and of building reasonably adequate housing in their place would not only improve living conditions for a considerable proportion of the people but would also offer large-scale opportunities of employment in the building industry. Such a program should be planned and sponsored by the Federal Government but should be carried out largely by private enterprise in collaboration with local authorities.

Plans have been worked out and a bill introduced in Congress which would make it possible for every family to obtain the food necessary for a healthy life at a price representing not more than a stated reasonable proportion, say 40 per cent, of its income. The plan would automatically leave out families whose earnings were large enough to meet their food requirements by use of less than the stated proportion of their income. Such families would have no occasion to use the plan. The plan would help to stabilize markets for agricultural products and thus have a definite anti-cyclical influence. It would also have the merit of not interfering with habits of consumption or with established channels of distribution.

In Canada an approach to the minimum standard has been made by providing a subsidy to every family for every child in the household. The application of the subsidy is universal but the well-to-do lose in income tax deductions what they receive in subsidy. It may be that this expansion of provisions for taking care of children is a step in the right direction.

An important means of assuring a minimum standard to underpaid groups is better organization. Effective organization results in increased bargaining power, and in a free society bargaining power is the most effective leverage for obtaining fair treatment. Responsible leadership and management of labor organizations, however, is a prerequisite of their effective operation in the common interest. Training programs to develop needed skills in workers who for one reason or another have become stranded would also be a step in the right direction. It is to be hoped that fewer and fewer people will remain in the minimum fringe and that the minimum itself will gradually rise to higher levels.

Other special devices may have to be developed from time to time to meet other requirements of the people. What is clear is that this country cannot afford poverty and its consequences in social, economic, and political conditions.

Social Security. Expansion of social security should be included in any comprehensive economic program. Our social security provisions are only a beginning, though a good beginning, in this field. Important risks such as loss of health are not included. We need much wider coverage and more adequate benefits both in unemployment compensation and in old age and survivors insurance. The goal should be universal coverage, and benefits sufficient to assure the recipients somewhat more than the established minimum standard of living. Eventually financing should be largely out of revenues raised by general taxation, although many

psychological and practical political factors need to be considered.

There are many technical problems involved in this question and different parts of the problem require special consideration, but there can be no substantial argument against the importance of broad-gauge social security as an element in stable prosperity. It is not a question whether we can afford it. We cannot afford the consequences of not having it. It is a social as well as an economic obligation upon the community, and a social and economic right of its members.

Taxation of Individuals. Tax policy is the greatest single instrument through which Government can influence the distribution of income and to some extent the channels of its utilization. This instrument should be used consciously as a part of economic policy and the extent of its use should not be judged entirely by fiscal needs or administrative considerations. The public interest will be served best by a flexible tax policy that supplements other parts of general economic policy.

Taxation of private enterprise has been discussed elsewhere. With respect to personal taxation, taxes on consumption should be held to a minimum because they are regressive and are an obstacle to consumption. Income taxes on the lower income groups should generally be as low as the raising of necessary revenues will permit. The income tax, however, should continue to be the mainstay of the tax structure.

Interest Rates. Financial problems after the war are likely to be much less complex and intractable than non-monetary problems. It is clear that the immediate responsibility of monetary authorities will be to maintain stability in the market for long-term United States Government bonds. In view of the size of the public debt and the widespread character of its ownership, we cannot permit wide fluctuations in the value of Government securities. Not only would they seriously disturb the economy but they would be a breach of faith with the individuals and institutions that have helped the war effort by lending a large part of their cash resources to the Government. Long-term interest rates, therefore, should not be permitted to rise substantially. Short-term rates, however, which are the more immediate concern of credit authorities, may well fluctuate in response to changing conditions. The abnormal spread between rates on long- and short-term money had its origin in the vast gold inflow and the lack of active demand for credit during the depression. The fact that the spread was later crystallized into a pattern of rates which was sustained during the period of war financing does not mean that it will persist after the war. In fact it is not likely to persist.

Banking. The country's banking system is in a strong position and it need not be concerned about a shrinkage of deposits. Its problems can be solved under constructive leadership by the bankers themselves and by the monetary authorities. The liquid position of most individual banks will enable them to meet shifts in deposits without strain. The major task of banks will be to develop energetic programs for making business loans and of rendering additional services so that their cost to the community will be fully justified by their contribution to its economic life.

Financing Small Business. Financing needs of small business enterprises require the adoption of constructive measures. Large enterprises are in a position to meet their needs for external funds by the use of existing credit and capital facilities. Small businesses need access to credit and capital at reasonable cost. Increased reliance on equity financing, which is desirable, will depend primarily on factors which encourage entrepreneurs to put additional funds into small business ventures. Among these are favorable taxation, Government aid and advice along technological and managerial lines, and the development of local investment organizations. Plans for providing the necessary facilities have been developed and should receive consideration.

Monetary Policies. Monetary authorities can play an important constructive role in the postwar economy by contributing to economic stability. To do that they must be prepared to view economic problems in a broad way and to fit their policies not only to changing conditions but also to other economic and fiscal policies of the Government.

Federal Reserve authorities will need in the postwar period all the powers over the general volume and cost of money that they have had in the past, and they should have additional authority over member bank reserves. They should perfect and expand the instruments of selective credit regulation acquired in recent years and develop an effective technique for using them in conjunction with the broader powers that influence general credit conditions. They must continue to utilize open-market operations, rate policies, and changes in reserve requirements, as well as the new devices such as margin requirements on security loans and regulations of terms for instalment purchases. Possibilities of further expansion of selective credit instruments, such for example, as regulation of real estate loans, are being explored.

Budget and Public Debt. In outlining this program of economic policies it is believed that there is nothing in the proposals that would interfere

with rational budgetary management. There is nothing sacred in the budget in and of itself. In periods of depression it cannot be balanced; the choice then is between unbalancing it deliberately by doing what needs to be done to bring back prosperity and having it become unbalanced by a decline in revenue and by emergency outlays reluctantly made but unavoidable. In periods of prosperity, with a reasonable tax system, the budget would be in balance. In fact, a surplus of revenue for reduction of the public debt would be likely.

If a rational economic policy is pursued successfully the budget would take care of itself; if it is not, the budget would not be the major difficulty with which the economy would have to contend. There is just as little excuse for expecting a balanced budget to be a major method of improving conditions as for considering a budget deficit—regardless of how incurred—to be a remedy for depression. How the Government raises taxes and spends funds is more important to the economy than the balance struck on the Treasury's books. No one looks to the budget as a major factor in military warfare and no one should look to it as a determining factor in waging war against destructive conditions in the domestic economy.

The corollary of this view on the budget is that expansion and contraction of the public debt will depend on the phase of the general economic program. The public's attitude toward the size of the debt will present important psychological and political problems that cannot be ignored. The debt also has a bearing on the proportion of national income that is frozen into fixed charges, which must go on year-in and year-out, regardless of the phase of the cycle. As the result of war, the public has no choice but to accept a public debt of a magnitude beyond the dreams of the wildest spender of a decade ago. There should be general acceptance by the public of the rational view that there is nothing alarming in the present size of the debt—provided an active condition of business is maintained. The long-term part of the debt can be viewed as a preferred medium of conservative investment, such as consols were in prewar England, and the short-term debt can fluctuate in volume in response to changes in the demands made on the budget by different phases of the economic program.

Formulation of Economic Policies. An agency should be established in Washington with the specific duty of formulating over-all economic policies. It should be headed by a person, probably connected with the Executive Offices, whose function would be to study, analyze, and coordinate economic policies in all fields of Government, both Federal and

local. He should have advisory committees drawn from Government departments and offices, from Congress, and from the different economic groups of the people. He should have access to all available information and sufficient staff to make it possible for him to prepare reports on economic policy and present them to the President, the Cabinet, the Congress, and the public. His function should be advisory, but he should help to crystallize opinion in the Government and in the country on programs of concerted action by the Government and the people for the achievement of the common goal—full employment and a rising level of general well-being.

This program, which is necessarily both generalized and incomplete, is presented solely as a basis of discussion of a wide range of highly controversial subjects. It is encouraging to reflect that there is fairly general agreement on the proposition that a high level of production and employment must be maintained in the United States and that periodic wholesale purges of the unsuccessful or the unlucky are neither feasible nor tolerable in modern society. It may not, therefore, be too much to hope that a way may be found to carry out the common will.

OUTPUT AND DEMAND AFTER THE WAR

by

EVERETT E. HAGEN

Formerly of Division of Research and Statistics, Board of Governors

Full employment of the labor force at productive work will be the major economic goal of the United States after the war. It must be achieved and sustained. On this the nation's leaders, in and out of government, are agreed. This does not necessarily mean that new policies, aimed at raising the level of demand and employment, must be adopted by the Federal Government. It is conceivable that full employment will appear, and endure, without public action directed toward it. The purpose of this paper is to analyze the prospects.

Many of the forces which determine the level of production, income, and employment in a dynamic economy are too intangible and subjective to yield readily to statistical measurement, and our understanding of the forces which are subject to statistical treatment, though rapidly improving, is far from perfect. Notwithstanding these obstacles to complete statistical analysis, the effort must be made to evaluate the power of income-sustaining forces after the war and the changes in them to be anticipated during early postwar years. Otherwise there is danger that in preparing for the future we may reason too extensively by analogy with past events.

One current belief, that reconversion is certain to be followed by an inflationary boom and collapse, is probably founded jointly upon the memory of 1918-20 and upon the apparent logic of economic development at the end of any war. After the First World War the depressing shock of cutbacks in war production temporarily outweighed the expansionary effect of pent-up demand for non-war products and a few months of somewhat reduced output and employment began in November 1918. Later, civilian demand—domestic and foreign—became sufficiently strong to drive prices upward. Speculation added fuel to the inflation and the boom of 1919-20 developed. Some sources of demand were only temporary, however, and other expenditures were choked off by the rise in prices. The result was the collapse of 1920.

But the sequence of events in 1918-20 may offer misleading clues to the reconversion period which began with victory in Europe in 1945. In a

number of ways, conditions are unique in 1945 and developments following victory in the Pacific may also be unique. The chief relevant contrasts between this and all previous wars are four: the comprehensive controls over production and prices during this war; the sheer magnitude of the reconversion problem; the volume of accumulated deferred demand and of liquid assets to finance its satisfaction; and the productive capacity which will be available when reconversion has been completed.

During this war, as in no previous conflict, we have developed a comprehensive system of direct controls over production and prices, including wages, and have used them to channel resources into war production and to restrain inflationary pressures. We are relaxing or abandoning some individual controls now, as it proves feasible; but if we are wise we will retain others during the reconversion period to eliminate bottlenecks, to check dangerous price pressures on products in short supply, and to prevent the diversion of materials and resources from the uses in which they will most speed reconversion. If we avoid inflationary distortions of relationships between supply and demand until reconversion has made it possible to meet a high level of civilian demand, we will materially lessen the probability of inflation and collapse.

The deflationary effect of a reduction in war expenditures will be far greater this time than in 1918. War expenditures then absorbed about 25 per cent of the nation's output; during 1944 and the first half of 1945, they absorbed almost 45 per cent. If Japanese resistance should collapse this autumn while reconversion is in its initial stages, the direct and immediate effect of sharp cutbacks in war demand would be highly deflationary. The shock to the economy might be so great as to dampen expectations and cause a significant reduction in later demand.

As in the case of previous major wars, we shall have an accumulation of deferred demand—this time foreign demand, demand for inventories, for plant and equipment, for housing, and for consumer durable goods. And now, more than in 1919-20, accumulated liquid assets will be a buoyant force. These liquid assets are held by both consumers and business enterprises. Their possession is apt to increase both consumer expenditures and business investment during the reconversion period, whether it be depressed or prosperous, and to intensify speculative activity should it develop.

But the spending which results will not necessarily be sufficient to cause inflation. When the war in Europe began in 1939, the United States economy was depressed. Much of the nation's productive capacity lay

idle. Hours of work were abnormally low, and between 8 and 9 million persons were unemployed. Since then all these idle resources and an unprecedented amount of additional manpower and equipment have been put to work, mainly at war production. Termination of the war will release so much productive capacity that the same percentage increase above prewar demand which brought inflation in 1919 might not provide work for our entire labor force. Until postwar demand is sufficient to activate economic capacity, there can be neither full employment nor a general pressure of demand upon productive resources. In particular industries, of course, where monopoly practices influence prices and output or where the limits of capacity to produce a given product are reached, upward price pressures may develop while unemployment is still considerable.

The circumstances which set the end of this war in economic contrast with earlier wars are in part expansionary, in part deflationary. Without analysis of the relative importance of the divergent tendencies, it is not possible to form a judgment regarding the course of events after the present war. The sections which follow attempt such an analysis. It is assumed that victory in the Pacific may occur by September 1945 and will occur not later than mid-1946. This assumption of course involves no prediction; it is made because some fairly definite assumption concerning the war's end is necessary as a basis for discussion.*

THE TRANSITION

The employment problem in the transition from war to peace may be symbolized by a single statistic: within a fairly short period, annual war expenditures of the Federal Government will fall by some 80 billion dollars. In April 1945, just before victory in Europe, they were at an annual rate of almost 90 billion. By twelve months after victory in the Pacific, they will be down to a few billions. A source of demand which has been absorbing almost 45 per cent of the nation's output will shrink by say nine-tenths.

Until this reduction in war expenditures has become substantial, the primary barrier to full employment will obviously be the time required

***NOTE:** Hostilities ended in August 1945, while this manuscript was in process of publication. The analysis which assumed that VJ-Day would be in September 1945 is thus the relevant one. Termination of hostilities in August will not seriously affect estimates for the transition period. Discussion of the first post-transition year, referred to as 1948, will apply to a somewhat earlier 12-month period.

for technical reconversion, not the lack of markets. The most extreme pessimist would not deny that during this period demand will temporarily be great enough to employ all who wish to work, if production for non-war purposes can be organized fast enough to take up the slack in output and employment as rapidly as munitions cutbacks and demobilization pay it out.

The first goal of reconversion policy must be to speed the revival of non-war output. Release of materials from war production in sufficient quantities to permit reconversion to get under way did not occur until mid-1945, some two months after VE-Day. In the third quarter of the year, decline in war production is proceeding gradually, and non-war output is rising slowly. This means that the first responsibility of the Federal Government with respect to reconversion is to reduce war production as rapidly as the prudently calculated needs of the armed forces permit, for except as resources are released from war use, reconversion cannot gain speed. The second responsibility is to guide the released materials and equipment into uses which will facilitate most the revival of non-war production.

Even if reconversion is handled with maximum effectiveness, however, non-war output of types now greatly curtailed or non-existent cannot rise rapidly overnight. It will take time to re-equip a plant for a changed type of production, to reorganize the flow of materials to that plant, to train or retrain workers, and to create a going production process. These problems will be acute in the production of consumer durable goods requiring metal. In the construction industry, problems caused by shortages will be complicated by the necessity of replacing thousands of small firms which have disappeared during the war. In 1940, there were 500,000 construction firms in the United States; at the end of 1944, the number was less than one-third as great. If large-scale unemployment develops while these problems are being solved, the resulting fall in income may cause a deflationary shrinkage of demand for nondurable goods other than food and clothing, and later for food and clothing as well. This would intensify transitional unemployment.

VJ-Day, the Major Shock. Because of these reconversion problems, if VJ-Day should occur this fall the ensuing reductions in war expenditures would bring a deflationary shock far greater than the short-lived one immediately following the armistice of November 1918. At the risk of considerable error, an estimate of output and employment may be hazarded.

Third quarter purchases of goods and services for war use will probably total between 18 and 19 billion dollars—an annual rate of about 75 billion. Unemployment during the quarter will probably average between 1 and 2 million. If VJ-Day should occur at the end of the third quarter, war expenditures would probably fall 50 billion dollars by mid-1946, and some 6-7 million members of the armed forces would be demobilized. How fast could non-war production rise?

Construction—both residential and nonresidential—and the production of consumer durable goods may be expected to expand as rapidly as output can be increased. The demand for machinery and equipment will be high. Foreign demand for American goods will be limited only by the availability of shipping and of funds with which to make payment. Businessmen will be eager to increase their inventories of goods which have been scarce during the war. Notwithstanding a reduction in income, consumers will be eager to buy not only automobiles, radios, washing machines, and other durable goods as they appear, but also shoes, textiles, and other semi-durable items of which consumer supplies are short. And purchases of non-war goods and services by Federal, State and local governments will rise somewhat.

The pages which follow estimate the effect of these increases in non-war output upon total production and employment through 1947. The table on page 28 summarizes the estimates. Without going into detailed estimates here, we may note that non-war production could hardly rise fast enough during the nine months following September 1945 to take up more than a third of the slack caused by demobilization and the fall in war expenditures. In spite of decline in overtime and some withdrawals from the labor force, unemployment would probably reach a peak of 7-9 million at some time during the first half of 1946.

If the Pacific war continues until the middle of 1946, and if war production continues the decline which is now occurring, the longer period will permit the completion of reconversion in many industries, and non-war output in reconverted industries will get under way. The economic shock of subsequent sharp cutbacks would be less severe, and peak unemployment during the remainder of 1946 might be between 4 and 7 million.

It should be noted that the demand which will stimulate rapid increase in non-war output will also bring inflationary pressure upon the prices of goods in scarce supply. This problem is discussed later on pages 29-31. It is one of the dangers of the reconversion period which must be guarded against vigilantly.

The Final Phase of Reconversion. Following the first abrupt decline after victory in the Pacific, war expenditures will continue to fall, but more slowly. Will the rise in non-war output be great enough and fast enough to outweigh the decline in production for war, or will transitional unemployment continue undiminished so long as the fall in war production continues? What is in question is not the post-transition level of demand, but the transitional balance between the speed with which war output falls and the speed with which other output rises.

The determining factors will be the rate of rise in exports, housing construction, production of plant and equipment for business use, and production of consumer durable goods. Restocking of inventories will also be important.

For a year or more after VJ-Day, the rise in output in several fields will be limited, not by demand, but by technical problems of reconversion. This will be true of private residential construction, for which the annual rate at mid-1945 was perhaps 500 million dollars. Construction activity is increasing gradually now. Experts estimate that during the first two years after VJ-Day, private residential construction will rise to an annual rate of about 4 billion dollars, and to higher levels thereafter. The estimates assume that business demand for construction will also be high. If business demand were low, residential construction could rise at a somewhat more rapid rate.

Technical problems will also retard full production of consumer durable goods. If present forecasts are correct, supply of some main types of consumer durables will run behind demand until at least the early part of 1947. This assumes only a moderate volume of deferred demand, in addition to the consumer demand for durable goods which would normally be associated with the income forecast below for 1947.

Business inventories, aside from manufacturers' inventories of war goods that will not be useful in peacetime, will be depleted after the war. They will probably be some 10 billion dollars less than the amount appropriate even for a level of business activity somewhat lower than we have at present. Goods declared surplus by the Army and Navy will probably meet somewhat less than one-half of this deficiency. The remainder will be met by new production as soon as materials can be obtained and processed, probably within 18 months following VJ-Day.

Demand for American goods for relief and rehabilitation in Europe and in Asia will temporarily be extremely large. For two or three years after shipping becomes available, exports for these purposes will be

determined largely by funds available to foreign countries to pay for them; by our generosity in contributing to the relief of distress; and by the amount of credit we are willing to extend. For fats, oils, and perhaps some meats, and for industrial products not now produced, American supply will be a limiting factor in 1946. Our imports will also be large. Experts differ concerning the probable level to which our net export balance will rise, but a minimum of 3 billion dollars and maximum of 4 billion seems a reasonable estimate. This level will probably be reached some time in 1947. Since our present balance, excluding goods purchased and exported by the Federal Government for war purposes, is an import balance of 1 billion or more, the shift will mean an increase in demand for the output of this country of 4 or 5 billion dollars annually.

The demand for business plant and equipment cannot be judged without evaluation of business needs at the war's end. The category "plant and equipment" includes all private construction other than housing, and all equipment used in business. Many persons think of manufacturers as being the chief purchasers of plant and equipment, but in prewar years only one-fourth of all investment in plant and equipment was by manufacturing industries; three-fourths was by other businesses—wholesalers and retailers, service trades, railroads, public utilities, farmers, etc.

During the war, billions of dollars have been expended for plant and equipment in war industries, but such expenditures by other industries have been severely limited by the War Production Board. Analysts disagree concerning the extent of the deficiencies which have developed. No conclusive evidence from which to form a final quantitative judgment is available, but existing information justifies the belief that demand for plant and equipment during the transition years will be substantially above prewar levels. The following analyses and surveys point in this direction:

(1) An analysis by the United States Department of Commerce of purchases of plant and equipment before and during the war indicates that in some manufacturing industries, and in many other fields, construction during the war was much less than in the several prewar years.¹ This is true of these manufacturing industries: food products; textiles; apparel; leather products; pulp, paper, and printing; stone, clay, and glass; and lumber products. (These industries accounted for 44 per cent of all manufacturing construction before the war.) It is also true of commercial construction and of miscellaneous private community facilities. Wartime farm construction just equaled in value that before the war.

¹ D. Stevens Wilson, "Wartime Construction and Plant Expansion," *Survey of Current Business*, October 1944. The periods compared are January 1937-June 1940 and July 1940-December 1943.

The analysis also indicates that purchases during the war of business vehicles (automobiles, trucks, and buses), of many types of manufacturing machinery, and of miscellaneous subsidiary machinery and equipment were much smaller than before the war.²

Since these industries whose purchases have been curtailed during the war will have a postwar volume of business far above that of 1940, an unusual burst of demand for plant and equipment seems certain.

(2) Scattered evidence indicates that farmers will be in the market for plant and equipment in amounts considerably exceeding their prewar purchases, unless farm income is seriously depressed.

(3) A survey of the investment plans of railroads for "the year following VE-Day" indicated plans for investment of 800 million dollars, twice the average for 1937-40.³

(4) Before VE-Day, the Department of Commerce requested a selected sample of manufacturers to report the amount of new plant and equipment they expected to purchase during the year following victory in Europe, and the anticipated volume of their sales.⁴ Sales expectations were well below the present level of sales—in fact were those to be expected at a level of gross national product of only 150 billion dollars, 25 per cent below the 1944 level. Yet in spite of these reduced expectations, manufacturers expected to invest 4.5 billion dollars in plant and equipment, an amount $2\frac{1}{2}$ times the dollar value of their average annual investment in 1939-40. In all probability, manufacturers did not indicate the entire amount of investment they plan in preparation for postwar business, for some must have planned to postpone investment beyond the year following VE-Day until materials are more readily available. It is also true that manufacturers will probably find the volume of their sales during early postwar years greater than they anticipated at the time of the survey, for the gross national product (stated in 1944 prices) will probably be above 150 billion dollars. This will tend to increase investment above the anticipated amount.

From these bits of evidence an estimate of total investment in plant and equipment during the transition years may be built. The expectations of manufacturers may be roughly typical of those for the entire economic system, since like the economy as a whole manufacturing contains both industries which have accumulated a surplus of plant and equipment during the war, and industries which have been unable to make good deficiencies. Total investment in plant and equipment in 1929 and again in 1937-40 was about four times that in manufacturing. Since manufacturers plan to invest 4.5 billion dollars, the 4 to 1 ratio suggests that total investment may reach 18 billion. It is noted above that plans of manufacturers expressed in the survey probably under-

² Manufacturing machinery and "other machinery and equipment" are not broken down in the published data. The statement in the text is based on unpublished estimates.

³ D. Stevens Wilson, "Planned Capital Outlays and Financing," *Survey of Current Business*, July 1945. A parallel survey indicated investment by electric and gas utilities only slightly above the average amount during 1937-40.

⁴ *Ibid.*

state the total they will actually make in preparation for postwar business. If so, and if other investment is proportionately high, the total will be well above 18 billion. Not all will occur in any one year, however, and several billion dollars of needs may be satisfied by the purchase of war surpluses. After allowance for these factors, 15 or 16 billion dollars is not an unduly optimistic estimate of total investment in newly produced plant and equipment in the first postwar year during which materials are freely available. If VJ-Day occurs in late 1945 or mid-1946, this total may be regarded as an optimistic forecast for 1947. During 1946 the level, though rising, would be much smaller. Rough guesses concerning the investment by non-manufacturing industries in which investment has been restricted during the war yield a range of estimates whose upper limit is consistent with this total.

Consumer expenditures for nondurable goods other than rationed foods, textiles, and leather goods, will probably be the only main category of non-war expenditures to decline during the transition period. The increase in these expenditures during the war has been as great as would normally be associated with the increase in consumer income after taxes. As income falls, these expenditures also will probably fall.

By combining estimates of the trend in output in all of these fields, it is possible to forecast total output, and hence also the level of income and employment. In making the forecast—especially for consumer income and expenditures—it is necessary to make an assumption concerning Federal tax rates. For if wartime rates are continued, consumer income and demand will obviously be less than if taxes are reduced. Continuation of wartime corporation taxes would also affect business investment.

In making the forecast, the writer has assumed the following changes in Federal taxes (in addition to certain other minor changes): that the corporate excess profits tax will be repealed effective in 1947, and if VJ-Day occurs in September 1945 will be reduced to 65 per cent effective in 1946; that wartime excise rates will revert to 1942 levels six months after VJ-Day, and will be further cut so as to reduce their yield by approximately 1 billion dollars, effective in 1947; that the normal individual income tax of 3 per cent will be repealed, effective in 1946 if VJ-Day occurs in September 1945, and in 1947 if VJ-Day occurs by mid-1946; and that surtaxes in the individual income tax will be lowered moderately in 1947. These assumptions concerning tax changes are not forecasts of Congressional action, but are believed consistent with the general nature of tax revisions to be expected. With war expenditures reduced as

indicated in the tabulation on page 28, the resulting tax schedules will balance the Federal budget, or yield a slight surplus, in 1947. If tax reductions are greater than is assumed here, consumer income after taxes will be increased, and consumer expenditures for some types of goods will also be greater.

The volume of unemployment during the period of transition will depend not only on the net change in employment opportunities in the civilian economy, but also on the size of the civilian labor force. This in turn will depend on the rate of demobilization of the armed forces, and on how many of the 7 million workers who entered the labor force because of the war will withdraw, and when they will do so.

Estimates of the size of the labor force and of the probable number of employed and unemployed workers at different stages in the transition period are given in the table on page 28, together with forecasts of the different types of expenditures that will motivate economic activity. Judgments expressed above as to the general course of economic activity are reflected in the estimates. Alternative sets of figures are given, one based on the assumption that victory in the Pacific will be in September 1945 and one on the assumption that the war will not end until June 1946.

The estimates are based on three assumptions concerning events after VJ-Day: (1) that cutbacks in the procurement of munitions not needed after VJ-Day will be as rapid as is administratively possible; (2) that price controls will be maintained on products under upward price pressure; and (3) that no emergency public employment program will be undertaken. The third assumption seems unrealistic; it is used, not because it seems apt to be fulfilled, but in order to distinguish clearly between the situation created by the war's ending and the improved conditions brought about by remedial or palliative action. If public works projects are undertaken which do not merely bid scarce materials away from private construction projects, they will diminish unemployment both directly and by augmenting consumer income and expenditures.

The tabulation is intended to present a general pattern of the probable course of events, not a firm conviction of the accuracy of specific figures. Subjective factors that defy statistical measurement may alter the course of one or all of the factors that determine the level of output and employment. It is believed, however, that the estimates present an optimistic view of the transition period—that non-war output is more apt to rise less rapidly than indicated, and unemployment to be greater, than the reverse.

Two striking features of the estimates may be noted. One is the very rapid rise in non-war output, after a short period of plant reconversion.

ESTIMATES OF OUTPUT AND EMPLOYMENT DURING THE TRANSITION
IN THE ABSENCE OF EMERGENCY PUBLIC EMPLOYMENT MEASURES^a

(Dollar items in billions, at 1944 prices—seasonally adjusted annual rates)

Type of expenditure	VJ-Day, Sept. 1945			VJ-Day, June 1946		
	Third quarter 1945	Second quarter 1946	Second quarter 1947	Second quarter 1946	Fourth quarter 1946	Fourth quarter 1947
Government expenditures for goods and services^b.....	\$90.0	\$46.0	\$31.0	\$73.5	\$50.0	\$32.0
Federal war expenditures....	75.0	29.0	12.0	57.0	32.0	12.0
Federal non-war expenditures	7.5	8.5	9.5	8.5	9.0	10.5
State and local expenditures.	7.5	8.5	9.5	8.0	9.0	9.5
Private capital formation.....	6.8	16.1	25.5	11.0	18.5	28.0
Construction—residential...	0.6	1.6	4.0	1.3	1.8	4.0
—other.....	1.7	2.5	4.0	2.2	2.7	4.5
Producers' durable goods....	5.0	7.0	11.0	6.0	8.0	13.0
Net change in inventories ^c ...	0.5	3.0	2.5	1.0	3.5	2.5
Net exports.....	—1.0	2.0	4.0	0.5	2.5	4.0
Consumer expenditures.....	101.0	101.1	113.0	101.6	104.2	117.0
Durable goods.....	8.0	11.0	17.0	9.5	11.5	18.5
Nondurable goods.....	61.5	59.5	60.0	60.5	59.5	62.0
Services other than rent....	25.5	25.0	29.5	25.5	27.0	30.0
Rent.....	6.0	6.1	6.5	6.1	6.2	6.5
Total gross national product...	198.0	163.0	170.0	186.0	173.0	177.0
Consumer income after taxes..	138.0	121.0	127.0	129.0	124.0	130.0
	(In millions of persons)					
Total labor force.....	64.5	62.5	61.0	64.5	63.5	61.5
Armed forces.....	12.2	7.0	3.0	11.0	8.0	3.5
Civilian employment.....	51.0	47.5	52.5	50.5	49.0	53.5
Unemployment.....	1.3	8.0	5.5	3.0	6.5	4.5

^a All output estimates are rounded to the nearest billion or half billion, except for construction and rent, where comparison between time periods would be distorted. Labor force estimates are rounded to the nearest half million.

^b Exclusive of "transfer payments," that is, subsidies, social insurance benefits, relief payments, etc.

^c Peak rate of 4 billion dollars not shown in the table.

In the case of an early VJ-Day, the rise is from an annual rate of 134 billion dollars in the second quarter of 1946 to 158 billion a year later. The other feature is the indication that in spite of this very rapid rise in non-war output, material unemployment will continue even into 1947.

The reason is that the decline in war production and demobilization of the armed forces will pour such a large continuing stream of persons into the non-war civilian labor market that even the rapid upswing in non-war production cannot immediately absorb them. The estimates indicate a gradual reduction in the number of unemployed. Whether this decrease will culminate in full employment following reconversion will depend on whether there will be demand for the output of full employment. This question is discussed in a later section of this paper.

Prices during the Transition. In order that the quantities indicated in the tabulation may clearly represent changes in the physical volume of output, price changes are ignored. All dollar figures are presented in 1944 prices. This introduces an element of artificiality; for whether prices on the average rise, fall, or remain unchanged, there will almost certainly be substantial changes in some prices relative to others.

The influences affecting prices during the transition are so complex that no attempt is made here to forecast their net effect either on the price level in general or on the prices of particular products. Some of the forces which will be at work have been indicated in the preceding discussion.

Demand will be stimulated by accumulated needs; by the large quantities of liquid assets in the hands of consumers and business enterprises; by the reduced level of instalment and book account debt; and by the increase in business investment, which creates income for consumers, and the increase in housing construction and in the output of consumer durables, both of which (because the products are sold on credit) create far more consumer income than final sales absorb. The preceding table indicates that the stimulating effect of all these factors on demand will be far less than the depressing effect of the reduction in Federal expenditures and the Federal deficit; the net result will be a reduction in the present strong pressure of demand upon the nation's productive resources. The sooner VJ-Day arrives, the greater the net fall in income will be in the months following, hence the greater the reduction in the pressure of demand.

This does not mean that we are sure to have deflation. Some analysts feel that demand will still be inflationary, even when reduced below its present level. In some fields this will clearly be true, because of shortages of supply. Housing and other construction will certainly increase far too slowly in many areas to meet the demand, as will the supply of automobiles, radios, washing machines, and other consumer durables. Whatever the general price situation may be, and with any probable reduction in

income, upward price pressures will certainly exist in these important fields. If price controls were to be removed at VJ-Day, within wide limits market prices of these goods would be almost entirely dictated by sellers. No matter how soon victory in the Pacific occurs, food will be in rather scarce supply well into 1946, according to specialists of the United States Department of Agriculture. Specific shortages of fats and oils will continue longer at any probable level of income and demand. The supply of textile and leather products will presumably increase sharply during the half-year following VJ-Day, if not sooner. Nondurable goods other than food and clothing will probably be in plentiful supply, relative to demand, soon after victory. In the event of an early VJ-Day, their prices will probably sag during the months following, whatever their later course may be. When food and clothing have become more plentiful, prices of all nondurable goods may weaken, even while some other prices are under upward pressure. The sooner VJ-Day occurs, the greater the chance that this will happen.

Certain influences will operate directly upon costs and prices, rather than in the market for final products. Organized labor will press for increases in basic wage rates. If VJ-Day occurs in 1945, and unemployment is high thereafter, the pressure may not be generally successful in 1946. The main factor which might preclude success in 1947, if unemployment decreases as estimated above, is the possible effect of "super-seniority" for returned veterans upon union strength during the transition. But increased wage rates may not mean increased prices. Corporate profits in 1944 totaled some 25 billion dollars before taxes and 10 billion after taxes. Contemplated reduction in corporation taxes will increase profit margins, and elimination of premium overtime wage payments will reduce labor costs per hour. Reduction of weekly hours, elimination of marginal workers, and the return to civilian employment of the physically most fit segment of the labor force will all tend to increase productivity.

The net effect in a typical plant will probably be a material increase in profit margins after taxes at present prices and wage rates, although in the case of reconverted plants this may not be true until the flow of goods has reached full volume. Thus increased wage rates *may* be paid without either raising prices or reducing wartime profit margins after taxes. But present profit margins seem abnormally low to many executives. Whether wage increases, if they occur, will in fact result in increased prices—and whether if wages are not increased, prices will fall—depends upon mana-

gerial decisions concerning the most advantageous relation between unit costs and unit prices in view of the demand situation at the time.

This discussion leads to no firm conclusion concerning the course of prices during the transition. It should be noted that the presence of strong expansionary forces will not necessarily bring inflation; their strength may be spent in holding deflationary forces. Either a moderate decline in the average of all prices, or a rise, or first the one then the other, may occur. We should be prepared to combat either tendency. In specific areas, upward pressures will clearly exist; the distortion in price relationships which they may cause, even if they do not start an inflationary spiral, is a strong argument for price control during reconversion.

AFTER THE TRANSITION: THE PERIOD OF DEFERRED DEMAND

A year or so after VJ-Day, the rate of decline in war expenditures will have been greatly reduced. Further decline in buying for war purposes may be largely offset by a rise in Government expenditures for non-war purposes. Reconversion of war plants to peacetime production will be substantially completed. A few months later output for civilian use will reach its full flow. The transition will have come to an end.

Let us assume that 1948 will be the first calendar year after transition. Whether the nation will then be in good economic health depends primarily upon the volume of output which it can produce at full employment, and upon the level to which deferred demand and other expansionary forces resulting from the war raise the demand for that output. How much will the nation be able to produce in 1948 if it makes full use of its manpower, and will there be markets for the goods and services it can produce? It is impossible to measure precisely the many interacting forces which determine the level of production and consumption, and the results of any quantitative analysis are subject to wide error. The estimates offered in the following sections should be considered with these qualifications in mind.

Full Employment Level of Output. The writer has estimated elsewhere that the nation's output at full employment in the first post-transition year will be more than 40 per cent above the 1940 output of 97 billion dollars.⁵ In 1944 prices, this would mean an output worth 180 billion.⁶

⁵ With E. A. Goldenweiser, in "Jobs After the War," *Federal Reserve Bulletin*, May 1944.

⁶ In the previous article, this was estimated as 170 billion dollars, in 1943 prices. Further research has convinced the writer that the price rise since 1940 has been greater than was then estimated. See "Postwar Output in the United States at Full Employment," *Review of Economic Statistics*, May 1945.

(Both the figure for 1940 and that for postwar include interest payments on the public debt.) Should prices be above or below the 1944 level, the value of the nation's output would be correspondingly changed.

This may be taken as a conservative estimate of full-employment output in 1948. It assumes that productivity is temporarily somewhat depressed.⁷

Demand in the Post-Transition Year. If the goal of full employment is attained in 1948, there will be 180 billion dollars of goods and services to be marketed. The comparable figure for 1940, the peacetime year of greatest output in the past, is less than 130 billion dollars in 1944 prices. Full employment in 1948 calls for an increase in peacetime demand of more than 40 per cent. What are the probable sources of demand?

Government Demand. Governments—Federal, State, and local—will purchase part of the 180 billion dollars of output. Federal expenditures will obviously be far higher than before the war. The consensus of published opinion is that Government pay rolls plus interest payments plus purchases of goods and services from private business enterprise will total about 30 billion dollars. Of this amount perhaps 20-21 billion will be expended by the Federal Government and 9-10 billion by State and local governments.⁸ Private expenditures for goods and services will have to total 150 billion if we are to have markets for the output of the economy at full employment.

Consumer Demand. In peacetime, by far the largest proportion of demand is for goods and services used by consumers. The share of total output purchased by consumers varies with changes in the level of income, but for decades before the war remained above two-thirds of total

⁷ Reduction in the size of the armed forces by 8-9 million would reduce the gross national product, 199 billion dollars in 1944, by some 10 billion dollars. The transfer of these men (except for casualties) to civilian employment and the normal annual growth in the labor force would counteract in part the reduction in hours of work from their wartime level and the withdrawal from the labor force of some two-thirds of the workers drawn in by the war. The net decline from the 1944 total in man-hours worked, assuming frictional unemployment of 3 million, would be some 5 per cent. This would reduce output by an added 10 billion dollars, to 180 billion dollars, and the shift of workers from munitions industries to others where the value of their output per hour will be less will tend to decrease it further. On the other hand, several influences will tend to increase output; namely, the increase in output per man-hour between 1944 and 1948 because of normal technological progress, increased efficiency due to reduction in the length of the work week, and the increased efficiency due to elimination of marginal workers and the return to civilian work of the armed forces. The estimate assumes that the favorable factors will no more than offset the unfavorable ones. It seems a conservatively low estimate.

⁸ For brief reference to the likely level of Federal expenditures, see the paper by Richard A. Musgrave, "Federal Tax Reform," in *Public Finance and Full Employment*, another pamphlet in this series.

output. An attempt will first be made to estimate "normal" consumer demand in 1948 exclusive of deferred demand for goods that have not been available during the war.

To estimate how great consumer normal purchases will be if we have full employment in 1948, it is necessary first to estimate the income which would remain in the possession of individuals after they have paid their taxes, and then to estimate what proportion of this disposable income they would spend. In calculations of disposable income of individuals, it is customary to include the profits of farm operators and other unincorporated businessmen, since it is impossible to separate the profits which the owner of a business holds as a businessman from those which he turns over to himself as a consumer.

The level of individual income depends upon the value of the nation's output. It is possible to estimate total income of individuals from the value of the nation's output, by subtracting those parts of business revenues which are not paid out to individuals, and adding income of individuals not derived from production (for example, veterans' benefits). Deduction of taxes paid by individuals then yields disposal income. Such an estimate is presented in the table below.

DISPOSABLE INCOME OF INDIVIDUALS AT FULL EMPLOYMENT IN 1948	
Computation	Billions of dollars
Value of gross national product	180
Less: Depreciation, depletion, and other charges to business reserves	—10
Less: Business taxes, other than social security taxes ^a	<u>—16</u>
Equals: National income.	154
Less: Corporate profits not distributed	— 6
Less: Excess of social security trust fund receipts over expenditures.	— 1
Plus: "Transfer payments" from Treasury funds and by States.	<u>+ 5</u>
Equals: Incomes received by individuals.	152
Less: Personal taxes ^a	<u>—17</u>
Equals: Disposable income of individuals.	135

^a The division of taxes between business and personal taxes in the tabulation is arbitrary. It does not affect the estimate of disposable income. Total taxes other than social security taxes are shown as 33 billion dollars. Government interest payments plus pay rolls plus purchases of goods and services from private business enterprises were estimated in the text above at 30 billion dollars. In addition, special payments to individuals—*e.g.*, to veterans, to farmers, to needy persons, etc.—are estimated at 5 billion dollars. The 2 billion dollar excess of public expenditures over taxes is explained in the text below.

It has been assumed that taxes will be levied sufficient to balance the

Federal budget and to balance State and local budgets except for 2 billion dollars of public works financed by funds accumulated during the war or by borrowing. The tabulation indicates that with output of 180 billion dollars, disposable income will be about 135 billion.

This disposable income is so far above any prewar level that no precise estimate of consumer expenditures at this level of income is possible. Disposable income in 1940 was 73 billion dollars. Even with allowance for the rise in prices, it is equivalent to less than 100 billion dollars at the 1944 price level. Three alternative estimates of consumer expenditures at disposable income of 135 billion dollars are all defensible.

(1) During the prosperous years 1923-29, expenditures by American consumers (excluding purchases of homes) averaged more than 90 per cent of disposable income. If an equal percentage of disposable income is spent in 1948, expenditures will total almost 123 billion dollars.

(2) But the average experience of 1923-29 may not be a good guide to consumer spending in 1948. Per capita income at full employment in 1948, after allowance for the difference in prices, will be more than 50 per cent greater than that of 1923-29. As income increases, the percentage spent may decrease. The data for the years from 1923 to 1940 show that as income *increased*, less than 90 per cent—in fact, only about 82 per cent—of the *added income* was spent.⁹ This was true during the prosperous 1920's as well as during the depressed 1930's. If consumers spend only 82 per cent of the increase from prewar levels of disposable income to the 135 billion dollars estimated at full employment in 1948, their expenditures will total only 119 billion dollars in 1948.

(3) Finally, some analysts believe that a tendency exists for savings to increase more and more sharply as income rises further and further. They argue that as disposable income rises to the unprecedentedly high level of 135 billion dollars, less than 82 per cent of the increase from prewar levels will be spent and expenditures will total less than 119 billion dollars—perhaps about 115 billion.

One important reason exists for rejecting the lowest estimate of expenditures: it is the great increase in the liquid assets of individuals which has occurred during the war. Between December 1939 and June 1945, the cash, bank deposits, and Government securities held by individuals, plus the cash value of their life insurance policies, increased from 74.5 billion dollars to about 199 billion. In 1939 these liquid assets represented less than 110 per cent of the year's disposable income of individuals; in 1948, even if they do not increase from the mid-1945 level, they will be more than 145 per cent of a disposable income of 135 billion. While no good data concerning the distribution of liquid assets exists,

⁹ Some analysts separate the increase in expenditures into two parts, that due to development of new desires, movement of individuals from rural areas to urban areas, etc., and that due to increase in income. These analysts claim that the data prove that in any given year an increase in disposable income of \$1.00 increases expenditures by only 76 cents.

it seems probable that the proportion held by lower income groups is larger now than it was before the war.

Without this increase in the holdings of liquid assets by individuals, it might well be that less than 82 per cent of the increase in disposable income would be spent; families might put much of their added income into liquid assets in order to have that comfortable feeling of security which comes with "cash in the bank" or its equivalent in other liquid assets. But very large amounts of liquid assets have been acquired during the war, when goods were not available. Possession of liquid savings certainly increases a family's tendency to spend its current income—even though the savings themselves are not spent. A guess may therefore be hazarded that at a disposable income of 135 billion dollars, consumer expenditures, aside from purchases to satisfy deferred demand, will total at least the middle estimate cited above, 119 billion dollars. Perhaps the influence of liquid asset holdings will be enough to raise the average percentage spent to the level of 1923-29. Tentatively, a range of 119-123 billion dollars may be taken as the estimate of "normal" consumer expenditures at 135 billion dollars of disposable income in 1948.

Deferred Demand. Deferred demand will cause additional consumer expenditures. Consumers have been accumulating a backlog of demand for a variety of durable goods—automobiles, refrigerators, radios, washing machines, and many smaller items. Some of the foregone wartime purchases will never be made good. A man who before the war purchased a new automobile each year, will not purchase five because five years have elapsed since his last purchase. But even after deduction of such purchases, accumulated demand will probably total between 15 and 20 billion dollars.

The demand would obviously not be made good in one year, even if the necessary volume of the wanted goods could be produced. Instead, the deferred demand will probably exercise some effect upon total consumer purchases of durables over a considerable number of years. The first post-transition year will be the first full year in which a full flow of these goods has become available. It seems probable that in that year, because of deferred demand, consumer purchases will be several billion dollars above the high total estimated—that is, will be between 122 and 126 billion dollars.¹⁰

¹⁰ This implies total expenditures for consumer durable goods of between 19 and 20 billion dollars. While 16-17 billion of this may be termed "normal" purchases, and 3 billion "deferred" purchases, the distinction is not meaningful. The total compares with an all-time peak of 10.3 billion in 1941 (at a lower price level), and less than 7 billion in 1944. Purchases in 1944 were composed of furniture and house furnishings, jewelry, and a large variety of small items.

It is important to remember that these estimates of expenditures are based on the assumption that disposable income will be 135 billion dollars. But this will be true only if total output equals 180 billion in value. Therefore, if the estimates of other expenditures indicate that total demand will not be sufficient to create a market for 180 billion dollars of output, it will be necessary to re-estimate disposable income and consumer expenditures. The estimates are only provisional, and are to be adjusted when the rest of the picture has been filled in.

Housing, Business Inventories, and Exports. Three other sources of demand for newly produced goods and services will be housing construction, business inventories, and net exports.

Most housing experts anticipate a postwar boom, and estimate that private expenditures for housing will average 6-7 billion dollars a year for a few years, if income is at the full-employment level. For residential housing construction to reach a 6 billion dollar level by the first post-transition year, it would have to rise by 5.5 billion, or more than 1,000 per cent, from the level attained in the first half of 1945. This would be an astoundingly rapid increase, especially in view of a potentially high level of business construction. The construction industry can probably accomplish the expansion if bottlenecks are broken, if shortages are relieved, and if the upswing is well under way before victory over Japan. An estimate of 5 to 6 billion dollars will be used here for the year 1948.

All or almost all of the wartime deficiencies in inventories of retailers, wholesalers, and manufacturers will probably be made good in 1946 and 1947. Hence inventory accumulation out of new production in 1948 will probably not exceed 2 billion dollars, and there may be none whatever.

The probable excess of United States exports over imports during the period of relief and rehabilitation has been estimated in the preceding section as between 3 and 4 billion dollars. That estimate is applicable to 1948 also.

Business Investment. No other large component of expenditures is so difficult to estimate as business investment in plant and equipment. Specific influences which are important in determining the volume of housing construction, or of inventory accumulation, or of exports, can be estimated with some degree of accuracy, so that at least a rough judgment may be hazarded. Business investment in plant and equipment, however, depends partly on the level of total national output, partly on whether that level is rising or falling, and partly on influences too intangible to forecast readily.

By assuming a large and rising national output, one may estimate a high volume of business investment in plant and equipment. But one may find that the assumed level of national output is justified only if the estimate of business investment is correct. Hence the conclusion may be merely a reflection of an assumption. This difficulty, which applies to some extent to the various estimates made above, is especially acute for an estimate of investment in plant and equipment. Furthermore, if an increase in business activity causes a high volume of business investment in plant and equipment, the effect may be only temporary. Once the nation's productive plant has been enlarged sufficiently to meet the high demand, investment may fall to a low level. In spite of these difficulties, an estimate of expenditures for plant and equipment must be made if any judgment concerning the future course of output is to be hazarded.¹¹

Business investment is made with one of three main purposes: to replace worn or obsolete plant and equipment, to meet enlarged demand for present output, or to provide capacity to produce a new (or changed) type of product.

To judge the amount of investment needed to replace worn and obsolete plant and equipment after the war, it is necessary to estimate how much has been needed in the past. The amount has typically been less than current charges to depreciation and depletion, both because of the conservatism of accountants in setting up depreciation and depletion charges, and because technical advance often makes it possible to replace the capacity of a worn-out machine or plant at less than the original cost, even though the purchase price of a given machine has not changed. During the 1930's, costs declined for the added reason that prices fell.

Between 1930 and 1939, inclusive, according to Department of Commerce estimates, total investment in plant and equipment was 63 billion dollars, approximately the same as total charges to depreciation and depletion. But productive capacity was not merely maintained; it was expanded considerably during that period. A smaller amount of investment would have served to make good depreciation and obsolescence. As a rough rule of thumb, this experience suggests that investment equal to three-fourths of depreciation and depletion charges is sufficient to maintain productive capacity. If so, the necessary amount of investment

¹¹ The Department of Commerce has begun a series of quarterly surveys of the investment plans of manufacturers and perhaps of other business groups. In time these surveys should further understanding of the influences which affect investment plans and their fulfillment and should become invaluable aids in forecasting.

averaged 4.8 billion during 1938-40. In view of the rise in prices since then, and of the expansion of capacity and the relative newness of a large portion of the plant and equipment which will exist in 1948, it is estimated that the amount of investment needed annually in early postwar years to replace worn or obsolete plant and equipment may be about 7 billion dollars. If the year 1948 is moderately prosperous, this much replacement investment may be counted on.

There remains the question how much net new investment will go into expansion of productive capacity in 1948. Any estimate of this item at this time can be little better than sheer guess. Evidence presented in the preceding section suggests that business activity will be high in relation to prewar levels, and rising, at the end of 1947. This would be favorable to a continued good volume of investment in plant and equipment. Two special influences will work in the direction of fairly high business investment after the war if market prospects are bright. One is the backlog of ideas for new products and new productive methods that will emerge from the war experience. Many of these will not have been applied to production of civilian goods by 1948. The other is that many business enterprises, like many individuals, will hold unprecedentedly large amounts of liquid assets with which to finance new investment.

In previous peacetime years of high or rising output net new investment has been between 3.5 and 6.5 per cent of the nation's output. During the prosperous period 1923-29, when gross national product averaged 90 billion dollars a year, total investment in plant and equipment averaged 9 billion. Of this amount probably 4 billion, or 4.5 per cent of the gross national product, was net new investment.¹² In 1929 the percentage reached a high of more than 6.5. Net new investment in 1940, calculated as a residual by using the rule of thumb referred to above to isolate investment caused by depreciation and obsolescence, was 5 per cent of gross national product. This was a rise from a level of 3.5 per cent in 1939.

It should not be taken for granted that any one of these percentages will apply to 1948. To assume that a potential national output of 180 billion dollars will automatically provide markets that will stimulate large investment in new plant and equipment is to ignore the fact that depressions have occurred and that business investment has been low when potential output was high. But if other circumstances stimulate invest-

¹² Depreciation and depletion charges averaged between 6.0 and 6.5 billion dollars: it is assumed here that 5.0 billion of investment was sufficient to make good depreciation and obsolescence.

ment, the size of the market bears some relation to the volume of investment which may be expected. The low and high percentages of gross national product cited—3.5 per cent in 1939 and 6.5 per cent in 1929—are therefore taken as limiting estimates of the business investment which may be induced by early postwar conditions—without any clear assurance that in fact they are the proper limits. By this yardstick, net new investment in 1948 would be estimated in round numbers at between 6 and 12 billion dollars. With outlays required by depreciation and obsolescence, the total of business investment in plant and equipment would be between 13 and 19 billion. If investment in 1946 and 1947 has substantially satisfied deferred needs and increased capacity sufficiently to take care of 180 billion dollars of output, the lower limit is the more probable estimate even if other forces bring a high level of business activity. To the extent that capacity is not fully geared to new high levels, investment may be higher than the lower estimate.

Relation of Potential Demand to Output at Full Employment. In the accompanying table the high and the low estimates for the components of potential demand at full employment in 1948 are brought together so that their total may be compared with the estimated total of output which would provide full employment. The low estimate of potential

ESTIMATES OF POTENTIAL DEMAND IN 1948 AND OF DEMAND
NEEDED FOR FULL EMPLOYMENT
(In billions of dollars)

Component	Low estimate	High estimate
Government expenditures for goods and services.....	30	30
Consumer expenditures, including deferred demand.....	122	126
Housing construction.....	5	6
Inventory accumulation.....	0	2
Net exports.....	3	4
Plant and equipment.....	13	19
Total potential demand.....	173	187
Demand needed for full employment.....	180	180

demand (173 billion dollars) is only slightly below the estimate of output at full employment (180 billion) and the high estimate (187 billion) only slightly in excess of that amount. The conclusion may be incorrectly drawn that demand in 1948 will at worst be only slightly deficient or slightly excessive. This would be seriously in error. For most of the com-

ponents of demand were estimated on the assumption that total output *would be 180 billion dollars*. This is true of consumer expenditures, housing construction, inventory accumulation, and business investment in plant and equipment. If demand and therefore business activity is somewhat less than assumed, inventory accumulation and investment in plant and equipment may be somewhat less than estimated. With lower consumer income, housing construction and other consumer expenditures will be less than estimated. These changes will cause further reduction in estimates of income, expenditure, and output.

Consider the estimate of consumer expenditures. It was made on the assumption that individuals will have disposable income of 135 billion dollars, an amount in excess of what they would have if total output was only 173 billion. With output at 173 billion, disposable income would be reduced by over 4 billion and consumer expenditures by over 3 billion. This reduction in turn would cause a further reduction in consumer income and thus in consumer expenditures. Without the intervention of forces to stimulate output, this deflationary process would be repeated until output and demand came into balance at a greatly reduced level of employment and production.

It can be shown that if a given decline in output reduced consumer disposable income by an equal amount, a deficiency of 7 billion dollars in demand would lead to a reduction in consumer expenditures of at least 30 billion before a level was reached at which demand balanced output. But it can also be shown that a given decline in output will not reduce disposable income by an equal amount, for several reasons. For instance, as output declines, corporate retained profits will decline. That is, a larger share of corporate gross revenues will be paid out and become individual incomes. Further, social security payments to individuals will tend to rise above the contributions collected from them. Most important, however, public budgets would not remain in balance with a sharp decline in income. Tax revenues would decline, and public expenditures, at least for relief, would rise. These changes would check the decline in individual incomes after taxes and hence in consumer expenditures. If only a very moderate Federal program to meet the distress of unemployment is assumed, the increase in Federal expenditures and the reduction in taxes, together with the changes in corporate retained profits and social security payments, would prevent consumer expenditures from declining by more than twice the original 7 billion dollar deficiency of demand.

As has been noted, the deflationary effect of the lower level of consumer income and expenditures on other expenditures would further reduce the levels of output and employment. Housing construction might fail to reach 5 billion dollars; business investment in plant and equipment would probably total less than the 13 billion estimated; some inventories might be liquidated. Thus the cumulative effect of a deficiency of demand of only 7 billion dollars would probably be to hold the gross national product down to a total of less than 160 billion.

At that level of output, unemployment (unless spread among all workers by shortening the work week below that of 1940, or disguised by migration to farms and in other ways discussed below) would total between 8 and 10 million. Thus the deficiency of demand indicated by the low estimate, though it seems slight, would have grave social repercussions.

On the other hand, if total demand were 187 billion dollars, 7 billion more than the estimated full employment output at 1944 prices, the additional demand would raise income, the added income would again increase demand, income would again respond, and an upward spiral of prices would be under way. In this case, the large accumulation of liquid assets might spur both "ordinary" and speculative expenditures, thus increasing the upward pressure and bringing serious inflation.

Among the assumptions made in deriving estimates for 1948 was that the Federal budget would be balanced. If tax rates are cut sharply from the wartime level while Federal expenditures are held at the estimated level of 20-21 billion for pay rolls, interest, and purchases from private enterprises, and 5 billion more for other Treasury expenditures, the budget may be unbalanced. If so, the direct effect would be to reduce unemployment if the lower estimate of potential demand is correct, and to increase inflationary pressure if the higher one is correct.

Thus the forecast indicates a range of possibilities from serious unemployment to serious inflation during the post-transition period of deferred demand. In the writer's opinion, no data at present available make possible an assured judgment as to which will eventuate. To him, demand not in excess of output seems most probable, even during this period of deferred demand. Neither deflation nor inflation need occur if vigorous preventive measures are taken.

It is possible that price rises and unemployment will occur together. They are not mutually exclusive. It is true that in a situation of perfect competition, including the ability of laborers and enterprisers to shift

easily from the production of one commodity or service to that of another, prices would not rise until full employment was reached. But where is there this type of competition? Certainly not in the highly mechanized and specialized economy of the United States. Even in the absence of any labor organization, and with keen price competition among enterprisers, some prices would rise before full employment was reached, because of the failure of productive capacity to match perfectly the demands of buyers, and the technical impossibility of quickly shifting idle human and mechanical resources in response to demand changes.

Among existing tendencies which cause prices to rise before full employment is reached are not only this technical situation, but also the presence of noncompetitive practices, including collective bargaining. But to the writer, management practices seem more important as a cause than the actions of labor unions. These practices include not merely collusion or monopolization of production of a given commodity, in the usual sense of that term—though such monopolization undoubtedly exists, even in cases where the courts rule that the anti-trust laws have not been violated. Perhaps more important, they include the practices referred to in the economic literature of the last decade as imperfect or monopolistic competition. Prominent among them is the recognized and ethical practice of building such pronounced consumer preference for a product that a price and profit margin may be established which would be impossible under keen price competition. Specifically, a price can be and often is maintained sufficiently high so that would-be competitors could and would readily produce, at a lower price, a commodity which physical analysis would demonstrate to be superior—except that the consumer preference established for the existing brand bars others from the market.

Because of this situation, it is sometimes possible to raise prices as demand increases, and may be more profitable to do so—notwithstanding the existence of unemployment and idle resources—than to expand production at existing prices.

Such administration of prices explains in part why labor unions strike for higher wages at a time when unemployed men would gladly work for the prevailing wage. Many such strikes are strikes to share large profits, which it seems reasonable to workers and to their leaders that they should share. Because he is not bound down by price competition, the executive who is forced to grant such a wage demand may then consider whether his profits, though they may be satisfactory, will not be augmented by widening his profit margin through a price increase.

This situation may exist after the war. It may result in a rising price level in 1948, even though demand lies somewhere in the lower half of the range indicated by the estimates above, with unemployment of say 3 to 8 million. With greater unemployment, the tendency would hardly operate. It is entirely possible that it will not operate at levels of unemployment considerably below 8 million, for at this time productivity may be rising rapidly. If so, employers may find that their ratio of costs to selling prices has not risen, even though they grant significant wage increases.

EMPLOYMENT AFTER DEFERRED DEMAND HAS RUN ITS COURSE

As purchases to satisfy deferred demand taper off, an increase in other expenditures must take their place or total expenditures will decline. More than this, since output per worker increases year by year even though hours of work decline, total expenditures and output must steadily rise or employment will steadily decline. Unemployment will increase not only by the amount of the decline in employment but also by the year-by-year increase in the labor force as the population of working age grows. During recent decades, the rate of increase in output necessary to maintain full employment of a growing and increasingly productive labor force has been more than 3 per cent per year. If output increases, but less than enough to offset gains in productivity and growth in the labor force, it is paradoxical but true that *output and unemployment may both rise, side by side.*

It was assumed in the preceding section that for a year or two after the war the disturbances of the transition would retard the normal increase in productivity. During the years 1948-50, however, productivity will probably rise with abnormal rapidity as wartime technical advances are shifted to peacetime uses. By 1950 productivity will probably be back to its normal trend, and at full employment the nation will be able to produce output worth 200 billion dollars in 1944 prices.¹³ For purposes of exposition, this figure will be considered the full employment level of annual output during the first year after deferred demand has run its course. The true level (at 1944 prices) for such a year may be higher, since that year may be later than 1950; but 200 billion dollars is a conveniently rounded figure to use as the focal point for discussion.

¹³ This assumes that the labor force in 1950 will be no larger than in 1948, the normal growth over a two-year period having been balanced by the gradual withdrawal of an additional million war entrants.

For convenience, the year in question will be referred to as 195Q. The reader must keep in mind that whatever the level of output may be in this year, it must increase moderately year by year; that it is a typical stage in an expanding process rather than a goal to be achieved once and for all. And, of course, the reader must understand that there will be no year in which deferred demand will stop suddenly. Some types will end soon; others will continue longer. The housing boom may last the longest of all. But by thinking of various types of deferred demand as coming to an end together, we can visualize the situation we shall approach, if we take no preventive measures, as deferred expenditures taper off one after another.

How Great Is Potential Demand? Two hundred billion dollars of output will create 200 billion dollars of income for business plus Government plus consumers. The question put at this stage is: If we enter the period when deferred demand has run its course without having paid much attention to the problem of stimulating demand, and with a balanced Federal budget, will demand be great enough to provide a market for this output? Because the general analysis upon which estimates must be based has been presented in the preceding section, only brief discussion is necessary here.

It is probably realistic to assume that in any prosperous peacetime year, public expenditures will at least be at the levels indicated above for 1948. Federal payments for interest, wages, salaries, and purchases from private businesses will probably total at least 20 billion dollars (rising non-war expenditures having replaced tapering war expenses), and in addition Treasury payments to veterans and to the needy and the handicapped will total 3 billion (or more). State and local governments may be spending about 10 billion dollars annually for interest, wages, salaries, and purchases, and an added billion for social security purposes. One of the 10 billion, not covered by taxes, may be for public works. Expenditures from Federal social security trust funds will probably be broadened; but it seems desirable here to estimate them without assuming a major change from prewar policy. Consequently, expenditures out of social security funds at full employment are assumed to be down slightly from those of 1948 when frictional unemployment was greater, and receipts to be up because of higher wage payments, so that the excess of receipts is 2 billion. Granted an unprecedented level of output and a large flow of business investment (which induces corporations to retain and reinvest profits), it is reasonable to assume that undistributed cor-

porate profits will be 8 billion dollars. Charges to business reserves are estimated at 10 billion.

If these conditions hold, and if total output is 200 billion, disposable incomes of individuals will be 151 billion dollars. The computation is presented in the table below.

DISPOSABLE INCOME OF INDIVIDUALS AT FULL EMPLOYMENT IN 195Q		
	Computation	Billions of dollars
Value of gross national product		200
Less: Depreciation, depletion, and other charges to business reserves		—10
Less: Business taxes, other than social security taxes ^a		<u>—16</u>
Equals: National income		174
Less: Corporate profits not distributed		— 8
Less: Excess of social security trust fund receipts over expenditures		<u>— 2</u>
Plus: "Transfer payments" from Treasury funds and by States		<u>+ 4</u>
Equals: Incomes received by individuals		168
Less: Personal taxes ^a		<u>—17</u>
Equals: Disposable income of individuals		151

^a The distribution of taxes between business and personal taxes is arbitrary. It does not affect the estimate of disposable income.

Following the reasoning of the previous section, and with allowance for the effect of accumulated liquid savings, we may estimate consumer expenditures out of this disposable income at between 132 and 137 billion dollars. This estimate makes no allowance for the possible tendency of consumer expenditures to decline below "normal," as consumers become stocked up with durable commodities.

Other possible types of expenditures are housing construction, accumulation of inventories, an export surplus derived from American investment abroad, and expenditures for construction and equipment by every conceivable type of business. Once a housing boom has cared for pressing accumulated demand, continued annual private expenditures of 5 billion for housing construction, even at high levels of income, are the most that can reasonably be hoped for.¹⁴ Without strong public stimulus, the amount may well be no more than 4 billion. If income falls, housing expenditures will certainly be below this figure.

¹⁴ The National Housing Agency estimates that the increase in the number of nonfarm families during the postwar decade will average 410,000. Annual construction expenditures of 5 billion dollars will build 800,000 units, if average construction cost per unit is \$6,250, or 900,000 units, at an average construction cost of \$5,550.

Even after inventories have been brought up to the desired size, continued increase year by year is to be expected if full employment is maintained and the nation's volume of business steadily expands. Perhaps inventory expansion averaging 1 billion dollars per year may be expected.

If the United States has participated in world arrangements and if mutual international confidence exists, possibly 2 billion dollars of American funds may flow into new investments abroad annually, even without Government lending. If these investments occur, there will be an annual export surplus of 2 billion dollars. Elementary facts concerning foreign trade are perhaps worth repeating. No employment will be created in the United States, except very temporarily, by curtailing imports. Foreigners must obtain dollars in order to buy our goods; a temporary export surplus obtained by blocking imports can continue only while foreign funds convertible into dollars are drained to the United States. That drain must bring about currency devaluations, trade restrictions (which would curtail our exports), and a worsening of the whole structure of peace. Only by making investments abroad in geographic areas which either do not have sufficient savings with which to finance their own investments, or do not have the industrial equipment to produce the capital equipment they desire, can we create an export surplus without harming other nations and forcing them to economic defense measures.

Finally, there will be business investment in all types of plant and equipment for domestic use. It is estimated that by 1950 the amount needed to make good depreciation and obsolescence will total perhaps 8 billion dollars. Once the postwar plant has been built up, the hope of continued high net new investment must rest largely upon the introduction of new equipment embodying technical improvements and upon the development of new consumer goods and new industries—though if income increases steadily, some investment would be needed simply to enlarge capacity to meet increasing purchases. During 1923-29, business investment was stimulated by the technological revolution which brought the expansion of the automobile industry with all of its auxiliaries, the electrical goods industries, the public utilities which served them, and a number of minor industries. Let us assume that a similar spectacular development of new consumer goods occurs after this war, and that it causes net new investment proportional in importance to that of 1923-29. It should be noted that this is a remarkably optimistic assumption. Annual net new investment in plant and equipment will then be 9 billion dollars, and total investment in plant and equipment, 17 billion.

High and low estimates of potential demand in 195Q for an estimated potential output of 200 billion dollars are summarized in the accompanying table. Whether the high or low estimate is used, it appears that demand will be inadequate to sustain full employment. Even the low estimate is optimistic, inasmuch as it includes a boom level of business investment in plant and equipment. If such a boom fails to materialize, or if, having occurred, it tapers off, the lower demand estimate should be correspondingly reduced.

ESTIMATES OF POTENTIAL DEMAND IN 195Q AND OF DEMAND NEEDED
FOR FULL EMPLOYMENT

(In billions of dollars)

Component	Low Estimate	High Estimate
Government expenditures for goods and services	30	30
Consumer expenditures	132	137
Housing construction	4	5
Inventory accumulation	1	1
Net exports	0	2
Plant and equipment	17	17
Total potential demand	184	192
Demand needed for full employment	200	200

It is illuminating to compare the high estimate with expenditures in 1923-29. Consumer expenditures are estimated at the same percentage of disposable income as in 1923-29, and business investment in plant and equipment at the same percentage of potential total output as the ratio between business investment and total output during the great investment boom of 1923-29. Yet total demand is deficient by 8 billion dollars.¹⁵

It is, of course, conceivable that demand will spontaneously exceed even the high estimate and reach a full-employment level. But that it should do so, and especially that it should continue to do so year by year after deferred demands have been satiated, seems to the writer so improbable as to be wishful thinking. Altogether, not to plan against the contingency of seriously inadequate demand in the absence of wise and vigorous policy measures seems foolhardy.

As in the forecast for 1948, it must be noted that the apparent deficiency of demand indicated in the table is not the total deficiency. For consumer expenditures, housing construction, inventory accumulation, and business investment in plant and equipment were calculated pro-

¹⁵ For footnote, please turn to p. 48.

visionally, on the assumption that national output would be 200 billion dollars. Since demand is inadequate to purchase that output, output will be below 200 billion, consumer income will not be great enough to bring about consumer expenditures of the amount estimated, and sales of business enterprises will not be great enough to induce the amount of investment indicated. Cumulative downward revision of the estimates is necessary, as has been described above in discussing estimates for 1948. This revision indicates that *even if the high estimates of demand should prove correct*, expenditures and output would come into balance at a gross national product some 20 per cent below full employment. If the low estimates of demand are correct, the decline in output would be much greater.

The Protective Coloration of Unemployment. If this fall in income and output is permitted, and if workers remaining at work continue to work full time and those thrown out of employment stand up to be counted, some 12 to 16 million persons will be found to be unemployed. But unemployment has a way of disguising itself by blending its color with that of the nearest emergency refuge. Unemployment becomes a shift to the farm, makeshift jobs, a movement out of the labor force, part-time work, so that the statistics catch only part of the facts. One million of the dismissed workers might drift to farms, there to contribute little to total output—since the farm labor force would be adequate without them—and to share the income of a depressed agriculture. A number would find refuge in struggling retail and service shops and in odd jobs. Perhaps a million or more, too proud to think of themselves as unemployed, would disappear from the labor force to be supported by the reduced incomes of relatives. Finally, the work week would be

¹⁵ With these important components comparable to those of a prosperous past period, the reader may wonder why the deficiency exists. The main reasons are three:

(a) A smaller proportion of gross national product than in 1923-29 will be needed for investment to make good depreciation and obsolescence. This is true because (apparently) the course of technical advance results in a gradual reduction of the amount of investment needed to maintain a given amount of productive capacity.

(b) Social security funds are estimated to absorb 2 billion dollars a year in excess of expenditures from them. No such deflationary drag existed in 1923-29.

(c) Housing construction is estimated at no more than 20 per cent above that of 1923-29 in dollar terms, and as a much smaller percentage of gross national product (2.5 per cent or less, compared to 4.5 per cent). This is true partly because in the postwar year selected for analysis deferred demand for housing is assumed to have been satisfied, whereas in 1923-29 there occurred the greatest housing boom in the country's history. But even at the height of the postwar housing boom—assuming that one occurs—the volume of housing construction will not have increased as much above that of 1923-29 as has potential gross national product. To a large extent, the demand for housing depends upon the rate of increase in the number of families. In the postwar decade that rate of increase will be less than it was between 1920 and 1930.

shortened by several hours, even though nine workers of ten would prefer the income of the longer hours of work to the added "leisure."¹⁶ This spreading of unemployment would shrink the number totally unemployed by 2 or 3 million. Altogether the equivalent of 5 or 6 million man-years of forced idleness or under-employment would escape the unemployment statistics, which would record say 8 million unemployed.

The statistical puzzles of 1933-40 would reappear. Some statisticians would probably add the output of 6 million workers to the level existing in 195Q, arrive at potential output of 170 billion dollars (at 1944 prices), and assure us that higher output was impossible. If conditions improved, workers who had withdrawn from the labor force would reappear, industrial employment would increase faster than statistical unemployment decreased, and the same statisticians would assure us that with output at record peacetime levels the unemployment figures were fallacious. But the unemployment, the deep distress, and the economic unrest which it generates would be there nevertheless.

Summary. These forecasts indicate the probability of unemployment of 6-8 millions during the reconversion period.

They further suggest the possibility that following reconversion the country may be faced with inadequacy of demand even while war-caused shortages are made good. If so, the inadequacy will become greater as deferred demands become satiated. In this case, there is danger that, resigning ourselves to reduced output, we shall permanently fail to attain the potential well-being within our grasp. This would be tragic.

On the other hand, transitional unemployment may give way to a boom of inflationary violence following which collapse is probable or, we may pass from a period of transitional unemployment through a prosperity period, and then experience either a sudden collapse as at the end of the 1920's, or a gradual sagging of demand below the country's growing potential. The country must be prepared for alternative developments during the short-run, and must be prepared to act with vigor to prevent either deflation or inflation following the transition.

Whichever may occur, to the writer it seems highly probable that the longer run problem will be one of inadequacy of demand. We may or may not have a 1923. If we do, we are also apt to have a 1929.

¹⁶ That workers will for a time prefer a 40-hour week to more leisure and less income is indicated by the increase in hours of work during the late 1930's, as demand for labor increased; by the alacrity with which workers accepted overtime work when war came; and by the privately expressed opinions of labor leaders.

MARKETS AND LIVING STANDARDS

by

FRANK R. GARFIELD

Division of Research and Statistics, Board of Governors

SUMMARY

Living standards in the United States by the middle 1950's may be as much as 60 or 70 per cent higher than they were in 1939—will be, in fact, if our resources in manpower, machinery, and materials are fully utilized. With a rise in population, total consumption would show more increase from the 1939 level and so also would total production.

Sharp expansion in output and consumption per capita seems possible, from the resource point of view, partly because the 1939 level was so low in relation to productive capacity, with 9 million workers unemployed and much equipment unused. By the middle 1950's, moreover, output per man-hour—and per worker—may be expected to be much higher than in 1939. This rise in productivity would reflect wider use of efficient procedures already known, introduction of new equipment and techniques, shifts in the composition of total output, and, it is to be hoped, a considerably higher level of activity. If the average number of hours actually worked were to be reduced from those prevailing in 1939, the increase in output per worker, estimated here at about 40 or 45 per cent for the decade and a half, would be less marked. Even so, the indicated rise in production and consumption from 1939, and more especially from 1945, would be large in comparison with increases in earlier periods of similar length.

During the war period production per capita reached a level nearly two-thirds above that of 1939 but practically all of the increase consisted of equipment and supplies for our armed forces and our allies. Civilian consumption showed little increase, as supplies of numerous goods were restricted, and the excess of total production over civilian consumption was very great.

Now that the war is over production is declining from the wartime level but may be expected to continue for some time considerably above consumption. In this country producers and distributors generally will be building up inventories and making repairs and replacements on a scale much greater than would be necessary on a continuing basis. Also,

in some lines, such as the telephone industry, expansion of facilities will be uncommonly large. For several years consumers will presumably be buying more automobiles, furniture, and other durable goods than they are using up and for a while they will be replenishing their supplies of clothing and many other semi-durable products. People in other countries will be in great need of supplies for relief, rehabilitation, and reconstruction, and if the goods are made available and adequate financing is arranged, exports from this country will be very large. At the same time production abroad will be limited, owing to the devastation of war, and other countries will not be able to send us a corresponding amount of their products. Surplus supplies of the armed forces will meet part but by no means all of the special demands of producers and consumers both here and abroad.

In this fashion production will probably be maintained at a fairly high level—for a time. Over the longer term, however, high production levels can be sustained only if consumption—consumption in this country—rises about as much from the 1939 level as production.

The sort of reasonable balance between production and consumption which will permit maintenance of activity and income at high levels will be difficult to achieve. The start is unavoidably from a situation adapted to wartime objectives but extremely unbalanced from a peacetime point of view. The levels to be sought are far above anything known in the prewar period. Maintenance of activity without wide fluctuations would represent a real departure from the record of the quarter century between the two world wars—and further back than that. Considering the intricacy of the longer term problems and the many differences of view as to their solution it is clear that a good deal of intensive thinking will be in order during the period ahead.

One approach is to consider first what the goals for our economy are or should be. They may be summarized as high living standards, with minimum standards much higher than heretofore; sustained full employment; a large degree of freedom of choice and equality of opportunity; and decent economic relationships with other peoples, contributing to enduring peace. These goals need not be inconsistent with each other. It is a good omen that many who prize freedom are facing and seeking to meet the very real problems of unemployment and inadequate living standards; and that many who seek full employment are quite aware of the difficulties which may arise out of bureaucratic controls.

In this paper the emphasis is on the goal of high living standards.

Good diets, housing, medical service, and education are important in themselves, even as the opportunity to work has a value all its own. Moreover, consideration of the whole economic process from the point of view of end products and their uses may at least supplement analyses centering on business operations or employment. Over the longer term, markets, wages, and profits in all lines depend on living standards to an extent seldom recognized. Some of the people, moreover, who would agree in general terms on the need for higher living standards may not have considered fully what these higher standards would mean in terms of new relationships between prices and wage rates and of new ways of life for their neighbors of high or low degree.

On the basis of available figures it appears that we can have sharp increases in consumption by the lowest income groups and at the same time have considerable advance among other groups. With a 65 per cent increase over-all, expenditures, in terms of 1939 prices, by the fourth of our families and individual consumers having the lowest incomes could be considerably more than doubled, while outlays by other groups were rising over one-half, on the average; or, if all those below the prewar average were brought up to that amount, a rise of two-thirds would still be possible for those above the prewar average. In view of the needs of people in the lowest income groups and the great production potentials, a good argument could be made for increasing outlays by these groups considerably more than is implied in the doubling of a small figure; the same dollar increase in expenditures by all families would mean an increase in consumption of about 160 per cent for the lowest fourth and nearly 35 per cent for the top fourth, with little increase, in percentage terms, for the top tenth.

Considering the potential rise along commodity lines, an increase of 65 per cent in total consumption would probably reflect increases of about that amount for housing and household operation, more than that for automobile transportation and medical service, less than that for things such as food and tobacco. Increases even for food, however, might be very substantial, judging by the much larger outlays made for food by the higher income groups than by the lower income groups.

With regard to minimum standards, numerous Government measures have already been adopted because standards developed through regular market processes and through private action in the way of neighborly sharing, organized charity, and informal price reductions, as on medical service, have proved insufficient. Government measures, however, have

often been of an emergency nature and in many instances have been inadequate, covering only part of the field and providing aid only in small amounts and for fairly short periods. Clearly, prevailing minimum standards relating to diet, medical care, housing, and education are altogether too low, considering our production potentials.

Much could be done to raise minimum standards through measures designed to increase incomes for the lowest income groups and to make essentials available to these groups at lower cost. On the income side, a variety of measures may be taken, including expansion of social security benefits. The primary source of income, however, should be wages; and there are strong arguments in favor of a commitment by the Federal Government that jobs will always be available. This proposal has many implications and may best be considered in relation to the operation of the economy as a whole. On the cost of living side, legislation which restricts consumption of low-priced products, such as margarine, should be repealed, and new measures should be adopted to make essentials available to the lowest income groups on terms which they can afford. Administrative problems will need careful consideration in working out a real program for minimum standards but techniques of administration have been greatly improved and it should be possible to cope with such problems.

The broader problem of achieving generally high living standards and sustained full employment may be regarded as the central problem of our economy and should be considered from many angles, even though things look complicated when more than one interest or one doctrine is taken into account. The challenge to economists and citizens generally to explore the situation is particularly sharp now because the shortcomings of the two decades following the First World War have been highlighted by the production record of the war period.

One fact to be noted early in such exploration is how closely economic developments in the United States are related to those in other parts of the world and how necessary it will be for us to take account of this in shaping our policies on a wide range of matters. Continued operation of synthetic rubber plants, for example, is no more to be regarded as a local issue than is the tariff. Increases in costs and prices which might put our markets out of line with those in other countries are to be scrutinized with great care; they may lead to reductions in trade, granting of export bounties and imposition of import restrictions—and also to retaliatory measures. However, increases in particular cost elements, say

wage rates, are not necessarily to be regarded as disturbing to international trade; it may be that higher rates reflect economies being achieved through further technical progress or through a sustained high level of activity, and that prices are declining rather than increasing as compared with those abroad. In any exploration of the international side of such problems, moreover, considerations beyond the economic sphere, even broadly interpreted, require special attention. The degree to which the possible mutual advantages of greatly expanded trade and investment can be realized will depend to a considerable extent on the nature of the whole foundation for world peace as well as on price relationships and levels of business activity.

Exploring domestic phases of economic affairs, everyone agrees that output should be much greater than it was in the years before the war. Generally, also, appeal is made to the record of the past, and especially the years since 1919, to develop particular views as to how such an increase can be brought about. The inferences drawn from the record, however, are varied. Some observers emphasize the importance of stimulating investment, others the importance of increasing consumption. Some are impressed with what private enterprise has done and can do while others stress what the Government will need to do to regulate or supplement private activity. These important differences of view persist although the quantity of facts available is much greater than at the end of the first world war and the number of people accustomed to deal with economic problems is greatly increased. Much work still needs to be done to obtain more agreement on major points of analysis and on a practical program. The extent of the rise required above prewar levels is not yet fully recognized, particularly with respect to consumption. Understanding of relationships among consumption, income, and prices is not yet adequate. There is on the part of many people a reluctance to see competition really enforced, and on the part of some others a tendency to underestimate enforcement difficulties and also the problems which in any event would remain to be handled through other means. Policy making, on the part of both private and public organizations, is still too much within the framework of a low-consumption business-cycle economy rather than of a high-consumption full-employment economy. In particular, prices in many fields are set by sellers—competitors as well as monopolists—at levels which are higher than they would need to be if producers did not feel obliged to assume that lean years were just around the corner. The circle is a vicious one and the argument for some sort of

action to provide assurance of reasonable stability at a high level of business activity is very strong. Efforts in this direction should be made in full recognition of the forces operating to perpetuate cyclical fluctuations but should be conceived in more comprehensive terms than heretofore and pressed more vigorously.

Arrangements to influence interest rates and the availability of credit, while useful, are not adequate of themselves to assure sustained activity. Appeals to businessmen and consumers to act as though they expected large volume, when many of them really do not, are likely to be insufficient. The growing impression that the Federal Government will intervene at some stage to prevent any sharp decline may have some effect in assuring markets, but this, again, is likely to be insufficient. If fairly general agreement on the matter could be achieved, perhaps the most effective single measure to provide assurance of sustained markets and sustained activity would be a commitment by the Federal Government, with reasonable exceptions and on reasonable terms, to provide jobs to those who cannot find them elsewhere. The cost to the Federal Government and the taxpayer would not necessarily be prohibitive; in fact, the fiscal and employment problems of the Government might easily be much less serious than if no such action were taken. Assurance of a sustained high level of activity would need to be accompanied by an expression of determination to prevent inflationary developments. The means for this are fairly well known, and if a job guarantee were to be made effective, restrictive action would not be as hazardous to the economy or as difficult to initiate as in the past.

As there is no single goal which we should seek to the exclusion of all others, there is no single method by which the set of goals we seek may be achieved. Perhaps one of the measures most essential in a democracy—in a way more basic than those already mentioned—is to broaden the participation of citizens generally in the development of economic policy. To this end more facilities could be provided to promote understanding of economic problems. Meanwhile, in a world where short-run interests and the interests of small groups find ready and determined expression, it is essential to have some broad notions as to the sort of methods which may help to achieve our main goals over the longer term. The suggestion here is that we should utilize market forces wherever they serve reasonably well but that we should shape affairs through Government action wherever the limitations of the market appear important, and the burdens of Government action seem not too great. One point at which our

system has failed thus far is in providing minimum standards of living which seem reasonable in terms of our goals and our production—and more especially in terms of our production potentials. The difference between actual production and potential production itself represents a failure which in the decade of the 1930's was great. These are major points at which the responsibilities of Government agencies will be and should be recognized to an increasing degree. In the international field too responsibilities of governments will be greater in the postwar years. The job of thoughtful participants in affairs will be to see that long-term and community interests are recognized and that action taken is consistent with all our goals as to living standards and employment, freedom and equality of opportunity, international trade relationships, and enduring peace.

POTENTIAL HIGHER LIVING STANDARDS

The future has always held a certain fascination for practically everyone concerned with economic affairs and particularly for those who hoped to turn a quick penny by forecasting shifts in values. Now many economists are engaged in guessing what may happen and suggesting programs for improving conditions. They use numbers rather freely in presenting their views, sometimes warning their readers that the numbers are only crude approximations.

Potential 60 or 70 per cent Rise in Living Standards. The statement made here that our resources are sufficient to permit a rise of 60 or 70 per cent in living standards by the middle 1950's, while believed to be reasonably reliable, is to be considered with due reservations. It is based on the assumptions (1) that total production may be as much as 85 to 100 per cent above the 1939 level; (2) that output of equipment and supplies for the armed forces, though larger proportionately than in 1939, is likely to be a very small part of total production; (3) that the portion of output for civilians going into current consumption will be about the same as in 1939; and (4) that the civilian population sharing in the goods produced—and in the use of existing goods—will be about 13 per cent larger than in 1939. The first estimate—as to potential total output—is based in turn on a whole series of assumptions. If there are about 15 per cent more workers in the civilian labor force than in 1939, and all except 2 or 3 out of every 100 of these workers are employed; and if those employed work on the average about 40 hours a week, the same as in 1939; and if output per man-hour rises 40 or 45 per cent over the intervening

period; then the 85 to 100 per cent expansion in total output will prove a reality. The figure for the change in labor force allows for continuation of the prewar trends toward more schooling and earlier retirement. It allows also for withdrawal from the labor force of those who have been added to meet the war emergency and for an increase over the prewar level in the number in the armed forces.

The two main factors which account for the potential rise of 60 or 70 per cent in per capita consumption from the prewar level are: (1) the low level of production and consumption in 1939, when one-sixth of our labor force and a considerable amount of equipment were idle; and (2) the 40 or 45 per cent rise in output per man-hour which may be expected on the basis of peacetime and wartime developments.

The war has temporarily slowed technical progress in some lines but has stimulated a great many innovations in other lines. A large share of these innovations can be adapted to peacetime purposes, especially if peacetime operations are on the scale indicated as possible. The estimate used assumes that over the period covering the war years and the first decade after the war, output per man-hour can show a rise, for all lines taken together, of a little over 2 per cent per year, compounded. This is fairly arbitrary and cannot be otherwise, partly because of the lack of really good historical information, except for certain time periods and certain parts of the economy. But even with large gaps in our information, the evidence of sustained increases in output per man-hour over long periods is very impressive and the probability that increases will continue is based not simply on the assumption of major new inventions but also on the expectation of continued minor improvements in a great number of materials, techniques, and products, and extension of the use of efficient practices already known. In manufacturing, the average increase in output per man-hour from 1899 to 1939 was 2.8 per cent per year, compounded, according to the National Bureau of Economic Research, and for the period from 1919 to 1929 the annual rate was 5.6 per cent. Peacetime improvements have been general in other parts of the economy, including mining, agriculture, transportation, and many other types of activity—but on the whole appear not to have been as large as in manufacturing.

Some readers may wish to raise the figure of 40 or 45 per cent considerably, perhaps on the ground that the necessities of war have taught us quickly much about manufacturing, transportation, and distribution at high levels of activity which otherwise would not have been learned

for a long time. If, for any reason, some other readers want to reduce the 40 or 45 per cent to 30 or 35 per cent they will find that the potential rise in production and consumption above prewar levels will still be very great. This is all that is basic to the further discussion.

Corresponding Rise in Production and Living Standards. Tacitly it has been assumed that a given rise in production would mean nearly the same rise in domestic consumption over the long term. It has also been assumed that production and consumption were roughly in balance in 1939, at a low level, and should be in balance, but at a high level, in the future period selected for comparison. The year 1939 was one in which the share of production going into capital equipment, inventory accumulation, and other "capital formation" was larger than in depression years, not so large as in the 1920's, and perhaps not quite so large as might be sustained over a long period.

In the years immediately ahead, production is likely to exceed consumption by an unusual margin as producers, distributors, and consumers all build up stocks depleted during the war. The financial position of buyers in this country will permit and encourage replenishment and also expansion of inventories and of capital equipment unless the troubles inevitable in the conversion period, such as unemployment and reduced incomes in war boom areas, should prove cumulative and come to dominate economic developments. Replenishment and expansion of stocks will include for consumers a wide range of durable goods—mainly automobiles and household equipment—and many semi-durable items like clothing. Additions to the housing supply will be made in substantial volume. For producers and distributors buying to replenish supplies will include many types of industrial and commercial equipment and of raw and semi-finished materials. Government agencies will need to undertake special work on highways and other projects set aside during the war. Exports are likely to be large relative to imports. Temporarily all this is likely to mean production greatly in excess of current domestic consumption.

This, however, cannot proceed for many years; and estimates of full employment conditions which depend very heavily on "deferred demand" all along the line relate primarily to short-term developments. Over the longer term there should be adequate replacements and also some rise in the community's stocks of goods—capital equipment and inventories at all points—as production and consumption increase. But the great bulk of any increase in production over the 1939 level must be matched by increased current consumption—or production will not be sustained.

Private capital formation, including residential building, amounted in 1939 to only about one-eighth of our total production. Total capital formation plus output of consumer durable goods has in no decade amounted to more than 30 per cent of total output. And capital formation itself is dependent in large degree, over any extended period, on final consumption.

Those who have studied cycles in residential building will have at hand a ready example of what happens when consumption in a particular line does not rise as rapidly as supplies are increased. Between 1925 and 1929, before the stock market crash or any general reduction in incomes, residential building in urban areas declined by nearly half. In one view too many houses had been built; in another view, prices and rents had been established at such high levels that people could not afford to move into better houses even though the general income situation was favorable. Certain it is that residential building declined sharply while large numbers of people were still poorly housed, according to their own standards or those of the experts.

It seems evident that the potential rise in domestic production should be reflected almost entirely in increased domestic consumption, either of domestically produced goods or of imported goods received in exchange for exports. For a time production for export will exceed imports from other countries by a substantial amount, largely because of shipments for relief, reconstruction, and development.¹ Over a longer period exports of goods and services can exceed imports to the extent that payment is taken in gold or a creditor position is developed; and in view of the advanced stage of industrial development in this country there is good reason for us to assist in the development of other economies. But a growing creditor position is likely to involve large interest payments to us and greater pressure to increase imports into this country. Thus if our exports are to be large our imports will need to be large also, assuming we wish to collect in goods or services for most of what we send abroad. The argument that we need to promote exports, and the implied argument that we should restrict imports, in order to increase investment, suggests that those concerned, here and abroad, should be willing to see our creditor position greatly and continuously expanded. It also suggests

¹ In view of the desperate conditions faced by many people abroad this winter we should clearly share our *relatively* abundant supplies of food, fuel, and other essentials at this time, even if that involves continued rationing and additional effort to avoid further price advances. Analysis here of long-term problems is in no way intended to minimize the importance of short-term problems, either in foreign or domestic fields.

that our arrangements for disposing in this country of domestically produced goods and of imported goods equivalent in the aggregate to what we can produce here will not be adequate. That possibility is one which needs to be considered—but mainly in terms of the domestic situation.

The student of economic history may object that talk of a nice balance between domestic production and domestic consumption at a high and rising level is nonsense because business cycles have been getting more rather than less severe, and to such an extent that some observers now talk about “secular stagnation.” It is true that many of the underlying factors which have contributed to business fluctuations before will still be present. The products of the economy will be similar and so will many of our ways of doing things. The historians may also note that we start with the whole economy exceptionally unbalanced, in terms of peacetime production and price relationships. Output for war purposes for a long time was over 40 per cent of total output as compared with a peak of one-fourth reached for a brief period toward the end of 1918. “Reconversion” will require more than mechanical changes in industries producing finished goods; markets will be needed on a large scale for finished goods and materials alike. Deferred demands from all quarters will be a sustaining factor for a time but in meeting these demands large supplies of new durable goods will be accumulated. A practical program for sustained high consumption and employment in the following period will not be easy to develop, in view of all the considerations cited. But that is precisely the challenge presented to us. If we recognize in advance the real difficulties ahead we may be able to do something about them; the effort might well be made before it is handicapped by emergency conditions.

Five Goals. With regard to the goals themselves, it has already been indicated that high standards of living and full employment of resources are important. Few people, even among those who enjoy reading “Walden,” would argue that we are likely to have too many goods, in the aggregate, for a while yet. Some people may already have more than is conducive to their own good or that of their children but for every one such there are hundreds at the other end of the income scale who lack even adequate food and shelter. In between is the great mass of people who are not as “badly off” as they might be but are hardly “well off.” That living conditions in the community generally are not what might be desired has been amply demonstrated, in respect to health at least, by the records of Selective Service examinations. Even in the field of edu-

cation, where our record in some respects is better than in other fields, conditions are still far from satisfactory. Standards vary widely both among States and within States and the best is no better than is needed for successful operation of a democracy under modern conditions.

Full employment is another broad goal which hardly seems debatable. It is important because only through full use of our manpower and other resources can potential living standards be realized. It is important because only if the demand for labor is great will jobs be readily available for all those able and willing to work. With jobs readily available workers generally would gain not only more regular income but also more of a feeling of security. Unemployment insurance and relief payments, while necessary at times, are poor substitutes for wages paid for useful work.

At the same time the idea of full employment needs definition. How many hours, for example, should be a week's work? And how many weeks should be a year's work? Jobs need to be defined also in terms of occupations, working conditions, and wage rates, not simply hours. And the size of the labor force needs to be considered—in very active or very dull times the number of job-seekers may actually be greater than in other periods. Questions could be raised too about the utilization of resources other than labor. Idle equipment implies a waste and so also does uneconomical exploitation of mineral, forest, and other resources.

Before unemployment problems became so important and discussion of full employment came to be the starting point of so much economic analysis, the goals of the economy were frequently stated primarily in terms of freedom of choice and equality of opportunity for the individual. These are still first-rate goals, and they are generally recognized as such. The questions now raised about freedom in economic affairs usually relate to freedom of business enterprise. The right of consumers to choose their own diet, perhaps with a certain amount of advice from health authorities as well as advertisers, is generally not questioned; nor is the freedom to choose a job to one's liking, although as a matter of practice the range of choice is affected by geographic considerations, the general economic situation, and various customs or rules enforced by employers, fellow employees, or Government agencies.

Issues concerning freedom of business enterprise relate in good part to circumstances in which the results of freedom—exercised within the framework of basic law with respect to property, association, contract, trademarks, patents, and the like—fall short of textbook promises of advantage to the community. Antitrust action is interference on behalf

of equality of opportunity for competitors and reasonable prices for consumers. Public utility regulation is aimed to provide fair prices where production under monopolistic conditions seems most economical. Pure food laws restrict a minority who would take advantage of flaws in the working of a system which assumes a greater degree of consumer knowledge than exists. Graduated income taxes were initiated to limit in some degree the inequalities in economic power developed in the market and in the secondary process of distribution, chiefly through the inheritance of property. Labor laws have been passed to cover a wide range of problems relating to working and bargaining conditions not readily handled through negotiations between individual workers or trade unions and employers. Collective bargaining has been recognized as essential in a world of large-scale enterprise. In the financial field a degree of Government participation has long been recognized as necessary and during the depression of the early 1930's rescue measures were undertaken on a large scale. And to be realistic any account of Government action bearing on freedom of enterprise should include an impressive array of laws passed to meet the problems of one small group or another without much reference to freedom of enterprise for other groups, as in the case of restrictions on imports from abroad or shipments across State lines.

Altogether the list of Government activities and the size of the tax bill have grown until many believe the goal of freedom is being sacrificed and along with it the benefits that might be expected from freedom in terms of large production and high living standards. Each reader will have his own views on the extent to which freedom and equality of opportunity have been made real—or impaired—by regulation, taxation, and, in a few fields, by Government ownership and operation. All will probably agree, however, on the great desirability of a high degree of freedom in the economy. Fortunately many who believe in this goal are willing to face problems relating directly to living standards and employment, recognizing the importance of "freedom from want" as well as "freedom from Government interference" and the necessity for selective Government action when existing conditions are unsatisfactory.

If we were actually to make great progress toward the goals of high living standards and sustained full employment, of freedom of choice and equality of opportunity, conditions should be favorable for concurrent progress toward another primary goal—the maintenance of decent economic relationships and peace among the peoples of the world.

The drift of all this is that any program for the entire economy should be

fashioned in terms of several goals, each of great importance. Consumption is not quite "the sole end and purpose of production" which Adam Smith asserted, but it does warrant more attention than is commonly given it in descriptions of what goes on or in programs for the future. Perhaps the American Economic Association was asserting this in highlighting consumption problems at the phantom annual meeting of 1945.

Background Data on Markets and Living Standards. Quite a little patience is required to understand what goes to make up living standards and the variety of living conditions actually prevailing in different parts of the country, in different types of communities, and in different income groups. Only since the middle 1930's have attempts been made to organize comprehensive information on these points and even now current changes can only be estimated very roughly.

The accompanying table shows how much, in the aggregate, consumers spent in 1939 for various classes of goods and services, including the esti-

CONSUMPTION EXPENDITURES, 1939

Item	Billions of dollars	Percentage of total
Total consumption expenditures.....	66.5	100
Total commodities.....	41.8	63
Total services.....	24.7	37
Food.....	18.8	28
Housing.....	8.8	13
Clothing and accessories.....	8.3	12
Transportation.....	6.5	10
<i>User-operated</i>	5.1	8
<i>Other</i>	1.4	2
Household operation.....	5.2	8
Household furnishings.....	4.6	7
Medical care.....	3.3	5
Recreation.....	2.7	4
Personal business.....	2.6	4
Tobacco.....	1.8	3
Personal care.....	1.0	2
Religious and welfare activities.....	.9	1
Reading matter.....	.8	1
Private education and research.....	.6	1
Foreign travel and remittances.....	.5	1

NOTE.—The total shown here for all consumption expenditures in 1939 is about 15 billion dollars greater than the total shown for 1935-36 in *Consumer Expenditures in the United States*, from which the estimates in three later tables are taken. This difference reflects mainly higher consumption in 1939 and the inclusion here of some items classified as "savings" or as "gifts" in that study. "Household operation" has been adjusted here to exclude household furnishings. "Recreation" has been adjusted to exclude reading matter.

SOURCE.—William H. Shaw, *Consumption Expenditures, 1929-43, Survey of Current Business*, June 1944, p. 9.

mated value of home-grown food and the estimated rental equivalent of owner-occupied houses. The dollar figures need to be read with special care because in the years since 1939 prices have risen considerably. The 66.5 billion dollar total, if expressed in 1945 prices, would be at least 90 billion dollars. Moreover, prices for some things, notably food and clothing, have gone up much more than the average while rents have shown little advance, affecting the proportions of expenditures for various goods and services. In the whole discussion it seems better to talk about what was consumed in 1939 rather than what is being consumed in 1945 because many wartime changes in consumption, caused by reductions in imports or diversion of materials to war production, are temporary.

The figures show that in 1939 about two-thirds of consumer expenditures were for goods and one-third for services, including housing. About 28 per cent of the total went for food; 13 per cent for housing; 12 per cent for clothing; 10 per cent for transportation; 8 per cent for household operation, mostly fuels and utilities; 7 per cent for household furnishings; and 22 per cent for all other consumption items.

In view of the great emphasis often placed on the growing importance of automobiles, furniture, refrigerators, and other consumer durable goods in our economy, it seems desirable to note that consumer expenditures for such goods have amounted, on the average, to only about 10 or 12 per cent of total consumer outlays. By far the greater part of consumer outlays is for nondurable goods such as food, for semi-durable goods such as clothing, and for various types of services. Purchases of new automobiles and parts in 1939 made up only about 3 per cent of consumer expenditures and were no larger than consumer outlays for gasoline and oil. The value of new houses built in 1939, which, incidentally, is regarded as capital formation and is not included in these figures, was only about 2 billion dollars as compared with about 9 billion for housing as a current service. Purchases of consumer durable goods have increased somewhat more rapidly than other outlays; but in thinking about possible increases in consumption over the longer term, it is necessary to keep in mind the importance of nondurable goods and of services and to see purchases of durable consumer goods in proper perspective as only a small, though growing, part of total consumer outlays. At the same time, for analysis of cyclical developments, it is important to emphasize the wide fluctuations which do occur in the purchase and production of consumer durable goods and also in production of certain other durable goods, notably houses, which render services directly to consumers. One

cause of such wide fluctuations is that in periods of uncertainty consumers can retrench somewhat without much sacrifice to themselves, merely by postponing the purchase of new automobiles or houses, meanwhile continuing to use what they have.

The table below indicates roughly what portions of the outlays for various products were made by the 10 million families and single con-

PORTIONS OF CONSUMPTION EXPENDITURES MADE BY
FOUR INCOME GROUPS, 1935-36
(In per cent)

Item	All groups	First group (Incomes under \$635)	Second group (Incomes of \$635 to \$1,070)	Third group (Incomes of \$1,070 to \$1,715)	Fourth group (Incomes of \$1,715 and over)
All consumption items.....	100	10	17	25	48
Food.....	100	13	20	27	40
Housing.....	100	11	18	24	47
Household operation.....	100	9	16	24	51
Clothing.....	100	8	15	23	54
Transportation.....	100	5	11	22	62
Auto.....	100	3	10	22	65
Other.....	100	12	18	24	46
Medical care.....	100	8	15	24	54
Recreation.....	100	4	12	22	62
Household furnishings.....	100	5	14	26	56
Tobacco.....	100	9	19	28	44
Personal care.....	100	10	18	25	47
Reading.....	100	10	19	26	45
Education (private).....	100	4	9	17	70
Other items.....	100	7	15	25	53

NOTE.—Each of the four groups includes 10 million "consumer units"—families and single individuals. The average number of persons in each "consumer unit" is largest in the first group, smallest in the fourth group.

The figures include allowances for food produced and consumed on farms and for rental value of owned homes.

SOURCE.—National Resources Committee, *Consumer Expenditures in the United States*, 1939, p. 90.

sumers in each of four income groups. These figures relate to 1935-36 and consequently the income levels shown for the various groups are much lower than they would be in 1945, and somewhat lower than they were in 1939. However, the proportions shown are probably not far from right for 1939, which is the starting point for our observations. The lowest quarter of families, ranked according to income, consumed about 10 per cent of the total; the second quarter 17 per cent; the third quarter 25 per cent; and the highest quarter 48 per cent. Of the total outlay for

food, 13 per cent was made by the lowest fourth, 40 per cent by the top fourth. Of total outlays for automobile transportation, 3 per cent was made by the lowest fourth, 65 per cent by the highest. It is evident that very great increases in total consumption would result if families in the lower groups were able to raise their standards a substantial part of the way toward levels already customary in other parts of the community. This point would appear in more striking fashion if the division were into tenths rather than quarters, because a large share of those in the top fourth had rather moderate incomes.

It is also evident that increases by the lower groups toward levels already prevailing in the upper groups would be greater for some products than for others but that even for food the increase might be very great. The increase in nutrition would not correspond to the increase in outlays—but nevertheless would be extremely important in making up the dietary deficiencies existing among large numbers of people in all sections of the country.

Increased consumption by the lower income groups would be of special importance in improving living standards—economists have long recognized differences in the meaning of a dollar to different income groups when talking about taxation and may as well extend this to discussions of consumption. But as long as there is little change in income distribution, markets will be found in large part among the people having the larger incomes; and a considerable part of any increase in consumption will no doubt come in the top half or even the top quarter of the income scale. It is here, for example, that most of the new products developed as a result of wartime discoveries will find their first markets. If consumption by the lowest fourth were to be more than doubled by the middle 1950's while consumption on the whole rose 65 per cent, there would still be a 55 per cent rise for the other groups, on the average. An equal dollar increase in expenditures for all four groups would mean an increase of nearly 35 per cent for the top fourth, a 160 per cent rise for the lowest fourth. Full employment itself would provide large increases in income for those previously unemployed and increase their expenditures. The extent to which full employment would bring about a corresponding increase in expenditures by the top fourth or the top tenth would depend on many factors, including selected pay scales, the level of profits after taxes, the level of interest rates, the degree of graduation of personal income taxes, and the amount of savings by this group.

The table on page 67 shows how people in the four income groups

divided their outlays for goods and services in 1935-36; it suggests that with generally higher incomes the proportions of family outlays for different purposes would change considerably. Items other than food, hous-

PORTIONS OF CONSUMPTION EXPENDITURES OF FOUR
INCOME GROUPS MADE FOR VARIOUS ITEMS, 1935-36
(In per cent)

Item	All groups	First group (Incomes under \$635)	Second group (Incomes of \$635 to \$1,070)	Third group (Incomes of \$1,070 to \$1,715)	Fourth group (Incomes of \$1,715 and over)
All consumption items.....	100	100	100	100	100
Food.....	34	44	40	36	28
Housing.....	19	21	19	18	18
Household operation.....	11	10	10	10	11
Clothing.....	11	8	9	10	12
Transportation.....	10	5	6	8	12
<i>Auto</i>	8	3	4	7	10
<i>Other</i>	2	2	2	2	2
Medical care.....	4	4	4	4	5
Recreation.....	3	1	2	3	4
Household furnishings.....	3	1	2	3	3
Tobacco.....	2	2	2	2	2
Personal care.....	2	2	2	2	2
Reading.....	1	1	1	1	1
Education.....	1	...	1	1	2
Other items.....	1	...	1	1	1

NOTE.—Each of the four groups includes 10 million "consumer units"—families and single individuals. The average number of persons in each "consumer unit" is largest in the first group, smallest in the fourth group.

The figures include allowances for food produced and consumed on farms and for rental value of owned homes. The figures in the first column here differ quite a little from those in the second column of the table on page 63 because of differences in items included, classification, period covered, and basic estimates. These differences however, do not greatly affect the differences in distribution of outlays by the four income groups.

SOURCE.—National Resources Committee, *Consumer Expenditures in the United States*, 1939, p. 85.

ing, and household operation account for about 25 per cent of the outlays by the lowest fourth and about 45 per cent for the highest fourth. In dollar amounts, as shown in the table on page 68, average outlays by the lowest fourth for items other than food, housing, and household operation amounted to about \$125 in 1935-36 while the corresponding figure for the top fourth was \$1,050. These tables also show that outlays for food and housing by the higher income groups were much larger in dollar amount than similar outlays by the lower income groups, although

for the higher income groups these expenditures were not as large a part of total outlays.

These data indicate that there is plenty of room for expansion in consumption without relying on the introduction of new products. As to new products, wartime developments in electronics, industrial chemicals, metallurgy, and the like have been very great and will provide the tech-

AVERAGE CONSUMPTION EXPENDITURES MADE BY
FOUR INCOME GROUPS FOR VARIOUS ITEMS, 1935-36
(In dollars)

Item	All groups	First group (Incomes under \$635)	Second group (Incomes of \$635 to \$1,070)	Third group (Incomes of \$1,070 to \$1,715)	Fourth group (Incomes of \$1,715 and over)
All consumption items..	1,273	500	870	1,262	2,458
Food	428	218	350	457	685
Housing	241	107	168	234	454
Household operation	134	48	88	129	270
Clothing	133	41	82	125	285
Transportation	118	24	53	105	291
<i>Auto</i>	96	13	37	84	250
<i>Other</i>	22	11	16	21	41
Medical care	56	18	33	53	120
Recreation	42	7	20	37	103
Household furnishings	36	7	20	37	80
Tobacco	24	9	18	27	43
Personal care	26	11	18	26	49
Reading	14	6	10	15	25
Education	13	2	5	9	36
Other items	8	2	5	8	17

NOTE.—Each of the four groups includes 10 million "consumer units"—families and single individuals. The average number of persons in each "consumer unit" is largest in the first group, smallest in the fourth group.

The figures include allowances for food produced and consumed on farms and for rental value of owned homes.

SOURCE.—National Resources Committee, *Consumer Expenditures in the United States*, 1939, p. 85.

nical basis for an unusual improvement in the range and quality of consumer goods.

A further analytical step would be to estimate in detail what expansion in consumption might occur under assumed conditions and to translate the estimates into terms of employment opportunities. Such a task is beyond the scope of this paper. It may be observed, however, that increases in employment would not necessarily correspond in amount to

increases in consumption; in any particular instance the rise might be smaller or larger.

It may also be noted that some changes in consumption would require little time, merely from a technical production point of view, while others would take considerable time. Supplies of most foods can be increased fairly rapidly. Housing would take much longer to bring up to advanced standards, because additions to the supply of houses in any one year are only a very small part of the total—and would be even if as many as a million and a quarter or a million and a half units were built in a year. Extension of medical service depends partly on the training of more doctors and the process of medical education is a long one.

As people approach all these problems they will be wondering about the probable size of the markets for food, housing, medical service, and the like. If expansion is to be adequate in amount and, broadly, in the most useful directions, it appears essential that people should be making their plans now in terms of markets which will exist if we have full employment and substantially higher living standards generally, with a more than proportionate rise in minimum living standards.

POLICIES ON MINIMUM LIVING STANDARDS

As already indicated, our resources in men, machinery, and materials will be so great by the middle 1950's that we could afford a standard of living 60 or 70 per cent above the 1939 level. Such an increase might conceivably be developed "across the board," with those in cities and on farms, in high income groups and low, in small families and large, sharing the increase in the same way that they shared the previous total. More likely, with full employment the proportions of income going to various groups would shift somewhat; and so also would the proportions of expenditures by these groups. Certainly a job for everyone able and willing to work would go a long way toward raising minimum conditions to a reasonable level. Even in that situation, however, special attention would probably be necessary to assure adequate consumption by the very lowest income groups; and if full employment is not achieved, the need for action on problems of this sort will be greater.

Need for Special Policies on Minimum Standards. The view that special attention to minimum standards will be required arises partly from comparison of actual living conditions with standards of adequacy which appear reasonable in terms of what the community can afford. Basic to this view is the idea that the consumption patterns developed

through the ordinary processes of income distribution are not necessarily the best possible. Even if it could be shown that each family gets back from the economy and consumes as much as it contributes or stands ready to contribute—and for a variety of reasons this cannot be shown—it would still appear desirable to raise minimum standards more than consumption generally. Only if minimum standards are far above what they have been can a reasonable degree of equality of opportunity be achieved. Only thus can the community at large avoid the many difficulties which arise when a considerable number of people live under sub-standard conditions.

Any very persistent questioning concerning the meaning of “sub-standard conditions” at different times and places would take the inquirer into a philosophical discussion of great breadth. On a common sense basis, however, it seems clear that one thing desirable and important would be for all people to have at least a good opportunity to enjoy the best of health obtainable within the limits set by individual heredity, the state of the medical arts, both preventive and healing, and the amount of economic resources available. This would represent a considerable extension of the widely accepted view that no one should be permitted to starve and would definitely contribute to the equality of opportunity which we have long been seeking through public education and other means.

The poor showing made in the Selective Service examinations by men of military age is evidence enough that health conditions in this country now fall far short of what might be desired. The record shows that 40 per cent of 22 million men of military age were unfit for general military duty because of various ailments, many of which were avoidable or remediable. The Selective Service System has estimated that one-sixth of the defects for which men were rejected could be remedied relatively easily. The Army, moreover, has inducted 1½ million men with “major” defects and rendered these men fit for duty. How many of the 9 million rejections would have been inevitable under the most favorable possible conditions is an unanswered question. There seems to be plenty of independent evidence, however, that poor diets, lack of good medical facilities, and bad housing conditions—generally associated with low incomes—contribute in an important way to unsatisfactory health conditions. Infant mortality, for example, is much greater among the lower income groups than among the higher income groups.

Health conditions depend on so many different interrelated factors that no simple quantitative statements can be made about the effects on

health of substandard living conditions. Where, as in some lands, millions of people die of starvation, there is no question that dietary deficiencies are important. In this country, the deficiencies are much less marked and are important chiefly as they contribute to diseases which may result from a variety of causes. The unfavorable effects of poor diets, although obscured, do appear to be widespread, especially among the lower income groups. This is no place for a technical discussion of thiamin and riboflavin, or calcium and phosphorus. Those who have studied such things, however, seem agreed that a large number of people should eat more leafy, green, and yellow vegetables, more citrus fruits and tomatoes, and more dairy products. In general, people on farms fare rather better in these matters than those in cities. But pretty generally actual diets fall short of recommended standards and in the lowest income groups the deficiencies are marked. This much seems clear from considerable research work in recent years on the proper standards and from numerous surveys on actual diets. For the benefit of those who are accustomed to attach importance only to those things referred to in numbers, perhaps it would be safe to add that data from the Consumer Purchase study of 1935-36 indicate that the diets of about 25-30 per cent of nonfarm families were "very poor," according to the standards of the National Research Council, and that 10-25 per cent of the diets of farm families fell in this class.

Actual proposals to improve minimum conditions will be developed chiefly to meet specific needs for better diets, better housing, better medical care, and better education rather than to make effective any broad design for a more equitable division of goods produced. In seeking perspective on these matters, however, it may be recalled that only 10 per cent of all goods and services consumed in 1935-36 went to the 10 million families or single individuals having the lowest incomes, while 48 per cent went to the 10 million families or single individuals having the highest incomes; and that the shares of the two intermediate groups were 17 and 25 per cent. With this sort of division of consumption—the differences are great, although considerably less marked than those in income—the share of any increase going to the lowest fourth might be very large without raising any questions about the merits of equal and unequal consumption.

To increase consumption by the lowest fourth considerably more than 100 per cent and consumption by other groups somewhat over 50 per cent would raise the share of the lowest groups from 10 per cent to 13 per cent of the total. At the same time it would mean an increase in absolute

amount for this group only half as large as that for the top fourth. This might easily be regarded as too little, especially since many would still have inadequate diets, health services, housing, and education. The average amount spent by the lowest fourth of "consumer units" (families and individuals) was about \$500 in 1935-36, somewhat more in 1939. The corresponding wartime figure would be considerably more than this, reflecting on the one hand much higher family incomes and on the other hand higher prices and some increase in the volume of goods obtained.

Special Policies Already in Effect. The idea of establishing some minimum is already widely accepted. Neighbors have always helped each other out, and organized charity has provided a certain amount of assistance. So also have informal price reductions such as those made by doctors. But this sort of thing has not proved adequate and various types of Government action have been developed. From time immemorial the poor-house has represented an offer of a general minimum of a sort, with the minimum set low enough to constitute a threat as well as an offer. Relief payments in kind represent another approach, one which leaves the individual little freedom of choice. Relief payments in cash are aimed to provide a minimum with more freedom of selection. In work projects the importance of employment to the individual is recognized. As a matter of tax policy, the smallest incomes customarily are exempt from income taxation. Under a Canadian law recently adopted the incomes of families with children are supplemented by regular allowances which, subject to some limitations, vary with the number of children; and in effect this is of direct advantage only to families which have small incomes, because income taxes have been increased.

In an attempt to put a floor under incomes for those who work, minimum wage laws have been enacted and are generally accepted as desirable, within limits, after much discussion among economists about possible effects on employment and much controversy in the courts over constitutional issues. To provide benefits which will lessen the impact of temporary involuntary unemployment, employers, and in a few States employees, in many types of establishments are now required to contribute to unemployment insurance funds set up by the States. Old age and survivors insurance is provided in a Federal system originally set up to be financed by pay-roll taxes. Wartime wage controls were designed to permit larger percentage increases in sub-standard rates than in other rates.

Another approach used by Government agencies is to make a limited amount of goods or services available to some groups at prices lower than

those prevailing in the market. The stamp plan for disposal of surplus food products and the school lunch program were partly moves toward meeting minimum requirements. Public housing offered for rent below the market comes under this heading too. Free medical treatment at public clinics is a service rendered to low-income groups, chiefly in urban areas. Public education, a major item, is furnished free to all groups. During the war period general price controls and subsidies on meats, dairy products, flour, and various other items have been used to restrain increases in the cost of living.

This brief listing, although incomplete, suggests that more is being done to establish minimum standards than is actually the case. Most of these measures cover only limited groups and some apply only in emergency periods. The amounts paid or the services provided as supplements to other income are generally inadequate in terms of decent living standards. Nevertheless, action along so many lines does represent some effort to cope with this problem and provides experience to use in judging more comprehensive proposals.

Ways to Increase Family Incomes and to Reduce Living Costs. Looking ahead, on the income side, there is need for expanding social security benefits and extending them to important groups which are not now covered. Questions about the share of the cost to be met through pay roll taxes should be reviewed. Minimum wage legislation should be continued in effect with increases in rates at least large enough to allow for higher living costs; but what can be done in this way is limited. More important are provisions relating to job security. Proposals for a guaranteed period of work each year will be considered in some union contract negotiations but the possibilities along this line, without broader measures, appear limited because of basic economic uncertainties, especially in the durable goods industries. From the point of view of minimum standards a Federal job guarantee would be very desirable and this should be taken into account in any appraisal of the effect of such a guarantee on the whole economy.

In general it appears that a large share of any sustained increase in income received by the lowest income group will be used in buying the more essential items although there are plenty of individual instances in which sudden large increases in incomes lead to extravagant purchases of luxury goods. Undoubtedly education in domestic economics, nutrition, and the like will be required to make most effective any increase in income which families are free to use wholly as they choose—and this ap-

plies far up the income scale. Provision of more adequate information about the quality of goods offered for sale would assist buyers in making their dollars go as far as possible.

There are many things Government agencies can do to reduce the cost of the most essential things to people who cannot afford them at the regular price. Further improvement in our system of free education is in order and free or low-cost health services for the lowest income groups can be extended. Public housing to rent below the market has reached few families to date, and until housing standards for higher income groups improve, tax payers are not likely to approve extension of the low-rent program to meet more than a small part of the housing problem for the lowest income group. The aim, however, should be to improve housing conditions generally rather than to slow down attempts to meet the housing needs of the lowest income groups. In the matter of minimum food requirements, serious consideration should be given to the proposed National Food Allotment plan. That program is designed to offer tangible encouragement to people in the lowest income groups to raise their food standards all the way to those provided by the "low-cost adequate diet"—as well as to provide larger markets for farmers and food processors. The administration of such a plan, as of any other in which large numbers of small transactions are involved, presents real problems; but certainly there is much to be said for the general approach of trying to meet consumer needs and to maintain producer incomes with a high level of output rather than simply to maintain producer incomes by restricting output and raising prices.

Finally, in considering means to reduce the cost of living for those in the lowest income groups, a special analysis might be made of prices charged for essentials to see where private and Government practices contribute to unreasonably high prices. The benefit of any program developed on the basis of such study would be shared by buyers above the lowest income group. Producers, however, might then find other fields of production or distribution more attractive; and so, even from the point of view of developing reasonable prices for essentials, it would appear necessary to develop proper pricing policies throughout the economy. This is part of the story about general policies.

GENERAL POLICIES

Interest in the broad problem of achieving sustained full employment and high living standards for the whole community has been widespread

in recent years, partly because so much went wrong in the two decades from 1919 to 1939. The sharp advance in prices in 1919 and early 1920 and the following collapse provide a special warning for the early postwar period, when supplies of many goods will still be short. The great decline in activity, prices, employment, and income during the early 1930's, with attendant acute financial difficulties, is still fresh in memory and provides a background for much current thinking about longer range problems. So also does the 1933 to 1939 experience of incomplete recovery from extreme depression. In the entire interval between the two wars, the period from 1923 to 1929 was the only one of any considerable length in which the share of our productive resources in use was reasonable. This period, moreover, showed less rise in consumption than in production and, with unfavorable developments in real estate markets, in security markets, and in the international situation, the drastic decline of 1929-1933 developed.

There were good features in the interwar period, including a rapid growth in productivity during the 1920's, a reduction in working hours from previous high levels, the introduction of many new products, and the extension of the use of many products to larger groups in the population. But on balance the economic record of these two decades fell far short of what might have been desired.

The shortcomings of these years were highlighted by the tremendous increase in production during wartime. This increase, it is true, did not prevent declines in civilian purchases of some services; of certain non-durable goods, such as meats, sugar, and gasoline; and of important durable goods, such as automobiles and household electrical equipment. Purchases of many other goods increased, however, and in the aggregate civilian consumption was maintained at about the 1939 level, or increased somewhat, even though 12 million of the physically most fit were inducted into the armed forces, huge quantities of munitions and supplies were furnished to our armed forces and our Allies, and imports were restricted. The wartime production record was achieved partly by special additions to the labor force, longer hours, and the like, which no one would wish to see continued; but aside from these factors it was an extremely impressive record. Manufacturing schedules which seemed impossible were met, and more than one forecaster learned in the hard way that the capacity of the railroads was much greater than he had supposed.

Variety of Views. The conclusions drawn from all this are varied, although everyone is agreed that production after the war should be much

larger than before the war. There is some difference of opinion concerning the amount of production required for full employment and high consumption, because judgments differ on the probable size of the labor force and more especially on the possible extent of increases in output per man-hour and the desirability of further substantial reductions in hours of work. Concerning policies to bring about any desired level of production, there is more difference of view, as the imagination roams far afield, less restrained by considerations of fact.

A great many people emphasize the importance of encouraging private enterprise and especially private investment in new industrial and commercial facilities, residential building, and the like. They point out that fluctuations in outlays for such things are very wide and urge that current consumption will take care of itself if investment is sufficiently encouraged. They cite the incompleteness of the 1933 to 1939 recovery as evidence that Government action cannot be relied on to bring full activity and suggest that the Government will do well if it can stabilize its own activities in roadbuilding, school construction, and the like. Many of these people hope to see private investment stimulated primarily by the adoption of a "hands off" policy on the part of the Government and the lowering of taxes on corporations and on individuals, especially those in the higher income brackets. Now, as in the past, they generally oppose or do little to support Government efforts to enforce competition, although some regard action along this line as basic to maintenance of the whole system. Their opinions concerning collective bargaining also continue to differ, but the issues now considered relate chiefly to the scope of organized labor activity rather than, as at the end of the last war, to the continuation of such activity.

In the view of another group, private investment is not likely to be sufficient over the longer term to absorb the savings people will make; and therefore the Government must be prepared to prevent unemployment, chiefly through fiscal action. This conclusion is reached through analysis of production potentials and prospective income flows. Thus an attempt is made to see how much income consumers, producers, and Government agencies would have under various conditions, how much they would spend in the ordinary course of events, and what special fiscal action the Government should take to bring prospective expenditures in the economy into line with production potentials and thus to prevent unemployment. Those who approach the problem in this way often assume that consumer expenditures will continue in about the same relationship

as before the war to the income which consumers have available after paying their income taxes. They find that if this is so, private investment will need to be very large indeed, as compared with that of the past, or else the Government must spend more than it receives. Until recently the emphasis of this group has been rather generally on the need for the Government to spend whatever extra amount is required to provide full employment, taking account of indirect as well as direct effects of such expenditures. Currently, with taxes at advanced levels and with the general income analysis being used more widely, there is more discussion about the desirability of reducing taxes to counteract any deflationary tendencies which may appear. Either way, great emphasis is placed on the ultimate responsibility of the Government for full employment and on fiscal action as an instrument of economic policy. Either way, the Government must survey developments continuously and be ready to act promptly. One question about these two alternatives would be how well action could be timed in each case; and another would be how the action taken would affect income distribution, consumption, savings, and investment. In general, fiscal policy occupies a central position in current economic discussions, similar to that held by credit control policy after the last war.

Another view is that considerable unemployment is likely to develop unless the Government takes action to facilitate the proper functioning of our economy through measures chiefly not of a fiscal sort. Those who take this position, as well as those interested primarily in what can be done through fiscal policy, often cite the record of the interwar period as evidence that Government action of one sort or another is essential if we are to avoid wide swings in activity and income. Many different proposals are made to deal with situations in which existing markets cannot be relied on to guide economic affairs, because of monopolistic influences, the nature of the product, or some other consideration.

Various proposals are made to expand Government efforts to do away with monopolistic practices and to establish competitive conditions. It is hoped that this would result in prices for many products more closely in line with costs over the long term and more responsive to changes in demand over the short term; and thereby would encourage full utilization of resources. Such proposals might require considerable revision of patent and other laws as well as increased efforts to enforce existing legislation. Another proposal, based on the theory that monopolistic elements are so pervasive in modern industry that they cannot possibly

be eliminated by Government order, is simply to appeal to those responsible for price policy in industry to set prices at levels which would prevail if there were competition, thereby promoting the long-term interest of business and the community generally.

One recent specific suggestion, made as part of a general program for stabilizing activity at a high level, is to have the Government survey the economic situation continuously and offer buyers special incentive payments to make purchases during periods in which sales and activity would otherwise probably decline. It is hoped that this would help to prevent cumulative declines in production, employment, and income, with relatively little Government expenditure. The incentives offered would apply only to commitments involving outlays of some minimum amount such as \$500 but would be applicable whether the purchases were to be made by producers or consumers, by private or Government agencies. Extra incentive payments would be made when buyers agreed to have projects undertaken not in an immediate period ahead but at such time as the projects might be needed most to provide orders and employment. This proposal involves considerably more Government participation in economic affairs than we have been accustomed to, but is advanced by its author, along with other recommendations, as a way of meeting the problem of unemployment within the general framework of the private enterprise system.

In all these approaches sustained high levels of employment and consumption are advanced or accepted as important goals. There is also a general desire that workers should have as much freedom as possible in choosing jobs and consumers as much freedom as possible in choosing goods and services. Differences relate to the emphasis appropriate for various goals and the effectiveness of various measures proposed. In the writer's view not enough attention has been given to high consumption as a goal and to measures directed specifically to this end. Activity can be developed along the most useful lines only if appropriate attention is given to consumption problems and the general level of activity can be raised permanently only through increased consumption. Deferred domestic demands and emergency foreign demands provide only an insecure foundation for economic activity and employment.

Policies to Increase Consumption. Direct emphasis on consumption leads immediately to analysis of the substandard conditions under which large numbers of people live and to some understanding of the need for action to raise minimum standards very sharply. Special policies which

might be adopted to help achieve this objective have already been mentioned earlier in this paper. Policies to raise minimum standards, however, constitute only part of a general program to bring about sustained high consumption. Here again direct emphasis on consumption affects the description of the way in which the economy operates and the selection of policies to improve conditions. While study of private investment focuses attention on the importance of fluctuations in output of producers' durable goods from one period to another, study of consumption directs attention to the large share of total production which consists of goods or services sold to consumers and to the necessity for growth in this part of the economy. Considering possible growth, there is clearly room for great expansion in the output of consumer nondurable and semi-durable goods, which comprise 85 per cent of all consumer goods and 60 per cent of all consumer goods and services. More expansion, in percentage terms, is possible for output of consumer durable goods. Services, including housing, education, medical care, and the like, can also be greatly increased. All of this, in turn, will require new investment; additional housing services, for example, depend directly on new construction. Tractors are required for producing food, looms for weaving cloth, and railroad coaches for providing travel service. Consumption is by no means the sole determinant of investment, particularly over short periods, but it is an important determinant, and one whose significance is often underestimated.

Policies designed to raise consumption may be thought of in three groups: policies to lower prices charged to consumers in regular markets; policies to increase consumer incomes; and policies to stimulate consumption directly through Government aid. The direct measures relate chiefly to minimum standards of education, diet, housing, and medical care, and need not be considered further. Tax policies, which affect prices, incomes, and the scope of Government activity, fit in this grouping only on a selective basis.

For a long time the principal emphasis in efforts to increase consumption throughout the community was on lower prices. The chief means advocated for establishing reasonable prices were competition, enforced where necessary by the Government, and Government regulation of prices of goods or services which could be produced most efficiently under monopoly conditions. In recent years the emphasis has shifted to higher incomes as the chief means of increasing consumption. In the writer's view, reasonable price relationships are considerably more important to

the successful operation of the economy and to high consumption than some students of the income flow suggest. The problem of obtaining such relationships through market processes, however, is by no means simple. Heretofore Government action affecting prices has been aimed to accomplish many diverse purposes, often to protect producers against competition from abroad or from other producers in this country. The attempts which have been made to establish competitive conditions have been impeded by many strong forces. It has been difficult, moreover, for legislators and administrators to determine what really fair competitive practices would be in different industries and to make their decisions hold in court. Clearly the search for more effective means to improve pricing practices needs to be intensified and Government support to particular prices should be continued or granted only under exceptional circumstances and for limited periods.

The increasing emphasis of recent years on higher income has been reflected in proposals designed to bring about full employment and sustained high production; to assure equitable bargaining conditions; to establish minimum wage rates and support prices; and to provide unemployment insurance or other payments to supplement the incomes of those in an especially unfavorable position. This approach has been reflected also in discussions of tax and other fiscal policies in terms of their effects on the level and distribution of income and also on expenditures. In the writer's opinion, with economic activity organized as it is, a considerable share of the large increase in living standards which is possible, from a resource point of view, can best be brought about through increasing incomes.

How much of their incomes consumers might spend rather than save under conditions of sustained full employment is something yet to be determined. As people moved into higher income groups expenditures would probably increase considerably. The amount saved each year would probably also increase, affording protection to an increasing number of families against risks not covered adequately in any social security arrangement now in effect or likely to be set up. Whether the proportion of income saved would increase or decrease under the changed conditions assumed is not so certain, as there would be strong forces working in both directions. Study of problems in this field, developed only in recent years, should be intensified; and, as a basis for such study, information about savings by various income groups should be greatly improved.

Concerning the probable or proper division of gains in productivity

between consumers, through price reductions, and producers, through increases in wages, salaries, interest, and profits, no simple answer is possible. It is evident that price reductions often provide a method for expanding output of a particular product and for spreading the gains in productivity in particular industries throughout the economy. It is also evident that absorption by employers or employees of all of the gains from a sharp increase in productivity in a particular industry would change the relationship between returns in that industry and in other industries where similar improvements had not occurred. But unless it is assumed that all present relationships are satisfactory it is not possible to know off-hand whether in a particular case such a change would be desirable. Those people engaged in any activity, moreover, may properly ask why all the gains of productivity should be passed along to consumers, or to some other group in their own industry, when many of the losses incidental to the change accrue to their group. Further, it is difficult for people to appreciate the importance of lower prices as readily as that of higher income. Expenditures are made a little at a time while receipts come in larger amounts, and outlays for many items can be avoided if prices get too high. Considering all this and the greater control people often exercise over the prices of goods or service they sell as compared with what they buy, it is probable that only part of the gains of increased productivity will be passed along to consumers in the form of lower prices. Remaining gains will continue to be shared by employers, employees, and the tax collector.

In the end, the greatly increased productivity in prospect will be reflected in incomes which are higher in relation to prices than in the past. One specific conclusion from this is that relationships between wage rates and prices should not be expected to resemble closely those prevailing before the war—wage rates should be relatively much higher. To set up a prewar standard on this would be to imply that the whole broad program of full employment and of high consumption, based on high productivity, would not succeed.

When we consider what policies might help most to bring about desired adjustments in prices and incomes, and to maintain employment and consumption at high levels, we quickly encounter many problems associated with cyclical fluctuations. Blocking a complete recovery in both production and consumption in the 1930's was a fear of inactivity and unemployment. Right now some estimates of future markets are influenced by expectations that there will be considerable unemployment.

And a large amount of unemployment is implied in customary ideas as to probable living standards. Even those who see the need for sustained full employment and urge measures to obtain it are careful to point out that they are not predicting it. The tendency to accept cycles as a starting point in shaping policies is understandable; the effects of this procedure are often serious, however, and need to be examined.

Prices are all too frequently determined on a "prince and pauper" basis—high enough in good times to make up for losses in bad times to come. These high prices, found especially in building and many other industries whose output varies most widely, discourage buying and often lead to restriction of output and to inefficiency even during good times. This applies to numerous consumer goods as well as to many producer goods. It applies in some degree to distribution, which accounts for a large share of the cost of many articles to the consumer, as well as to production. War experience, for example, suggests that the cost of hauling freight on the railroads could be reduced, if continuous operations at a high level were to be assured. In general the cycle feature of price determination is not primarily a matter of competition or monopoly; competitors as well as monopolists look ahead and take precautions that should not be necessary. It seems essential, if we are to have prices suitable for high consumption and high production levels, that we have reasonable assurance that those levels will prevail.

The effects of cyclical fluctuations are also evident in policies which restrict the flow of income in periods of relatively high activity. Wages and other income payments are considerably lower than they could be if high production levels were to be maintained and, if, therefore, costs were to be calculated on a somewhat different basis. Corporate profits are often retained rather than distributed, partly as a measure of protection against impairment of financial position in depression and possible loss of control by those in charge. Such preparations for depression, necessary as they seem, have unfortunate effects in limiting the flow of income as well as in holding prices at too high a level. The advantages of sustained full production and advance assurance thereof might be reflected partly in lower prices and partly in larger income payment to wage-earners and other income receivers. Profits could be larger with lower profit margins, if volume were to be maintained.

To provide the assurance of general stability which is essential if business and individual decisions are to fit conditions of full employment and high consumption is a task of the first magnitude. Heretofore most

Government efforts to cope with business cycle problems have been made after depression conditions developed. It has been recognized for a long time that action should be taken in advance, if possible, but the scope of preventive action actually taken has been limited. The experience of the 1930's has shown how extremely depressed conditions may become with an unusual combination of adverse circumstances, and it has led to adoption of numerous measures to provide some cushion against the sharpest declines in income and to prevent excesses of the sort which developed in the 1920's.

In the writer's view, the responsibility of the Government for assuring general stability should be recognized much more clearly than in the past and the most thoughtful attention should be given by the people of this country to measures which might provide the necessary assurance. In his opinion the proposal which offers the most prospect of being effective, if generally supported, is a Government guarantee that jobs will always be available to those who are able to work and willing to work. There would need to be reasonable limitations as to age and the like, and the terms of employment offered would need to be most carefully planned in relation to the terms of employment on other jobs. Such a guarantee would involve a commitment to spend large sums under certain circumstances, and naturally a crucial question to be considered would be whether it would really help to prevent the development of depression conditions and thereby avoid costs which would otherwise be incurred. Clearly, such a measure should not be expected to be a cure-all. In some periods it might even contribute to excessive optimism and inflationary developments; but the techniques for preventing inflation are fairly well known and it should be possible to meet any such contingency. Meanwhile, plans could be made by business, individuals, and Government agencies within the framework of the assumption that depression conditions would not again be permitted to develop, certainly not on any such scale as in the 1930's.

In this discussion of policies to increase consumption as productivity rises and to prevent wide cyclical swings in activity, little has been said about differences among broad classes of products and markets. Perhaps the difference between durable and non-durable goods, emphasized so much since the early 1930's, should have a primary place in any such analysis; certainly wide fluctuations in output of durable goods, both for producers and consumers, warrant special attention. The writer believes, however, that in many current studies too much attention is focused on

durable goods—and on producers' goods—and that solutions are sought too much in terms of measures which are immediately related to investment, and investment over short rather than long periods. The need for increasing consumption appears to be basic for many reasons, including the fact that over the long term the level of investment is determined in considerable part by the level of consumption. It is recognized that the amount of plant and equipment which producers buy does depend partly on other factors, such as the advantage to be gained by installing modern cost-saving equipment. In the past, with a high degree of freedom of enterprise, technological progress has been rapid and certainly any program for the future should include adequate incentives to encourage experimentation with new methods and introduction of new equipment and new products. But concern about the need for encouraging private investment often leads to misplaced emphasis in policy formation. Undue attention may be focused, for example, on the need for reducing corporate taxes rather than for lowering taxes which bear more directly on the consumer and restrict consumption. Again, this approach often leads to too much emphasis on profit margins and not enough on volume operations. This need not be so but it often is. Further, and this is a key point in the whole argument, emphasis on investment may mean too much reliance on devices to stimulate activity temporarily and not enough on plans to raise levels of activity permanently through growth in consumption. It is true that the problem of increasing consumption itself may look least difficult for the short term when approached indirectly through expansion of output of durable goods or of producers' goods; but, unless meanwhile many more goods and services are made available to consumers at prices which they can afford to pay, the rise in consumption will not be adequate and the expansion in activity will prove temporary. Houses need to be occupied as well as built and machinery needs to be operated as well as installed.

Another day it may be possible to carry this discussion forward to take account of the many special problems which would be encountered in applying general observations to particular situations. Meanwhile, the problem of improving housing conditions is dealt with at some length in another paper in this series, and consumption problems are considered either directly or indirectly in various other papers, including those on competition, employment and wages, social security, agriculture, and international economic affairs.

Anyone who pauses more than a moment to view the economic scene

must be impressed with the complexity as well as the importance of post-war problems, and with the difficulties in the way of understanding and dealing with these problems. With a modicum of good sense and good will all around, however, it should be possible to increase our understanding and to make further substantial progress toward common goals of high living standards and sustained full employment, freedom and equality of opportunity, decent international trade relationships, and enduring peace.