

## II. The Meaning of Maximum Production and Means of Attaining It

“Full employment” and means of assuring it were the ideas animating the movement that eventually bore fruit in the passage of the Employment Act of 1946. But since employment was not desired as an end in itself but rather as a means, “purchasing power” was early linked with employment as a major objective of the bill. Then, as congressional study and debate gave deeper insight into the meaning of true national prosperity, the term “maximum production” was written into the declaration of objectives before the present law was passed.

It is perhaps not too much to say that this belatedly added phrase is the one that should be kept foremost in our analysis of conditions and trends and in our efforts toward betterment. For clearly, maximum *employment* may be achieved in a rich economy or in a poor economy, in a static economy or in a dynamic and growing economy. It is only by maximum *production* that an economic system can translate its resources and skills into the highest standards of living attainable at any particular stage of technological development. The inadequacy of the goal of mere number of jobs—whether we call it full or maximum employment—has been demonstrated during the first year of operation of the Employment Act. For we were astonished to find, after the country had reached the idealized figure of 60 million jobs, that the volume of production still was disappointing. And with production shortages, we also found that abundant monetary purchasing power confronted us with inflationary dangers rather than calling forth adequate production.

In its first annual report the Council undertook a preliminary exploration of the general concept of sustained employment and the two ideas, “maximum employment” and “maximum purchasing power,” regarded by many as the key phrases in the law under which we operate. In this second report, we pass on to a brief consideration of what “maximum production” implies and what would be entailed in reaching a state of maximum production and also of maintaining it—not a single spurt, but a well-sustained level of achievement.

### WHAT WOULD “MAXIMUM” PRODUCTION BE?

Certain critics of the high employment philosophy were fond of pointing out that countries having low levels of production are typically the countries of full employment—everyone slaving away with feeble tools to eke out a meager living. They probably did not quite want to go so far as to say that the coming of capitalistic production makes it necessary that many people be unemployed because our machines are so powerful that there are not enough jobs for all. Some of the

captious ones among them burlesqued the full employment phrase as meaning a return to long hours of toil, use of the physically unfit, and coercion of the unwilling.

In the final drafting of the Employment Act, the Congress met this imaginary difficulty by avoiding any reference to job guarantees (much less any possibility of coercion) and defining the goal as "useful employment opportunities, including self-employment, for those able, willing, and seeking to work." This of course left the whole question of the length of the work week open. We shall undoubtedly hear much more of that issue in future years as workers and employers bargain over the question of how many hours at the bench or beyond the portal are best fitted to the conditions of a highly industrialized society. We shall ourselves say something about it in a later part of this report.

The very use of the phrase "industrialized society" points up the fact that the whole question of how much a man needs to work or wants to work, or how fully a nation shall draw upon the manpower of its children, its women, and its old people admits of no absolute answer. It is highly relative to the habits and ideals of consumption which are entertained, and the productivity or efficiency of labor during the time that it is being applied. Thus, when the Employment Act sets up an objective of maximum production, it is not reasonable to interpret that phrase as meaning the very largest total mass of goods and services that could be turned out for consumption during a given year. It must in all reason mean that volume of production which the people of a country when given opportunity to apply their labor whenever they see fit and under efficient conditions of employment, will want to turn out before they prefer to turn their time to the enjoyment of leisure.

It is evident too that this practical interpretation of the phrase "maximum production" implies also that the scale of production at a given time shall be adjusted to a reasonably long-time perspective. This means sensible conservation of natural resources, timely enlargement and modernization of capital equipment, prudent provision for training of future workers, and the research and experimental work necessary for the systematic improvement of technology. What this means in simplest terms is that, in thinking of what maximum production requires within the meaning of the Employment Act of 1946, we must center attention first on the wise development and use of our natural resources and the proper provision of capital goods and capital funds.

#### FORESIGHTED DEVELOPMENT OF RESOURCES IS NECESSARY TO MAXIMUM PRODUCTION

At the beginning of the production process are the basic physical resources provided by nature but administered by man. The soils, forests, grazing lands, and water must be conserved and developed if high

production is to be permanently maintained. The minerals, which are irreplaceable resources, must be used vigorously but wisely. In this matter the long view must be taken to insure that the flow of benefits from resources will remain steady during the years ahead. The future should be discounted, but at a socially sound rate, with both existing and prospective factors carefully weighed and with due regard to needs and costs.

The conservation and development of natural resources are not the exclusive concern of any one person, group, or agency. The hill farmer who moves his cornfield down into the valley, the pulp and paper company that restocks a cut-over area according to sound principles of forest management, the mining company that takes the long view in developing as much as possible of its ore reserves rather than skimming off the richest part only, the government that builds a multiple-purpose dam to provide the benefits of irrigation, flood control, navigation, and better recreation—all these, and many others may contribute. The primary need is for a true coordination of the efforts of all.

During the war, because of overwhelming need for military production, and since the war, because of the industrial reconversion requirements, both private and public programs of basic resources development and conservation have largely lapsed. The few exceptions relate to the search for and development of strategic minerals. To an alarming degree we have been living, and fighting, off our capital—of forests, soils, ground water, and minerals. We must now resume large-scale efforts on behalf of our national estate. Otherwise, the foundation of our expanding and highly productive economy will crumble and bring down the structure of production and consumption that rests upon it.

#### HIGH PRODUCTION DEMANDS ADEQUATE CAPITAL

Every literate citizen knows that productivity in our modern industrial and scientific age depends on the supply of capital or working equipment quite as much as it does on labor effort and availability of natural resources. In fact, many of the natural resources most important to our lives today do not lie within the reach of man's hands at all; they are available only to his machines and to the delicate appliances of discovery. Thus, as a people, we must find ways of keeping up our research laboratories and educational plant; our mining and our manufacturing machinery; our trading and communications equipment; our forests, orchards, and breeding herds; and our agricultural implements and structures, if that amount of work that we regard as satisfactory fullness of employment is to yield us the largest practicable product for consumption.

Indeed, since even our amusements are to a great extent mechanized, we need to accumulate and maintain a considerable capital stock of "playthings"—ranging from the syndicated movie chain, the commercial bowling alley, or amusement park down to the individual's fishing

tackle and golf clubs—if we are to get the fullest consumer satisfaction also out of our leisure hours. Present standards for our “content of living” require a considerable paraphernalia for play; we are not content merely to loaf.

The problem with which this Nation must be concerned if we are to have sustained employment and a maximum flow of national product over an indefinitely long future is how to strike the best working balance between (a) that amount of current consumption which will maintain the working population in a state of physical health and mental satisfaction, including a sense of confidence in sustained well-being, (b) the wise conservation and development of natural resources, and (c) the technological progress and the amount of capital formation which will stabilize like conditions for the future. While this may imply a conflict of aims in the short-run action of individuals, there is no contradiction in the long-run over-all picture. It is not a case of trying to eat our cake and keep it too. Rather it is one of being provident enough to know how to eat enough of the current harvest to keep up the strength and zest of the people while at the same time keeping a large enough supply of seed to assure a somewhat larger planting next year. But it does not mean grinding toil and meager living for the family so that “Pa can raise more corn to feed more hogs to buy more land to raise more corn to feed more hogs” *ad infinitum*.

Even widespread recognition of the principle that large supplies of capital are needed for maximum production of consumer satisfaction in an era of modern science and engineering is not enough. We are still far from being in full mastery of the day-to-day practices that need to govern the related processes of consumption and capital formation. Some are too impulsive and self-indulgent to follow a good practice. If society relied on them, we would have but scanty equipment. Others are so obsessed by the thrill of technical efficiency or so moved by the personal acquisitive urge that, when in a position of control, they force a socially poor practice on themselves and others. They would cause capital formation to outrun current enjoyment. Men would be serving the machine instead of being served.

#### HOW CAN THE ADEQUACY OF CAPITAL BE JUDGED?

Since even wise and well-intentioned men often find themselves in doubt or disagreement as to just when our capital provision is in fact “adequate,” we may well ask if there are no clear criteria to follow.

The engineer is likely to set a very high mark because he thinks in terms of technical performance. As soon as a new process or an improved machine is available, he is eager to see it universally adopted and promptly installed.

The business manager likewise is disposed to be capital-hungry. His attitude, however, is more complex. He feels that additional or different equipment will enable him to reduce costs and to produce a product of better quality and greater consumer appeal—toward the end of better profits. But when these profits are received, there is still the question of their distribution to meet consumer satisfactions as against their reapplication to further capital use. The crucial question is whether the interplay of these forces strikes the best working balance between immediate enjoyment of goods and services, and the technological progress and amount of capital formation which will provide greatest enjoyments in the long run.

Viewed in long-term perspective, the central problem does not seem to be so much one of providing business managers with enough funds to assure adequate capital provision for sustaining maximum production as it is one of assuring willingness or determination to sustain maximum production even when the financial requisites are abundantly available. Aside from certain temporary shortages of materials, the main obstacle is the concern—well-founded or ill-founded—on the part of business managers that the maximum development of capacity and production will lead at some time in the foreseeable future to “overexpansion” or “overproduction” with consequent business losses of a serious or even catastrophic character. The task before us, therefore, is to probe the genuineness of this concern, and, in so far as it is founded in reality, to indicate the ways for removing its causes.

It is sometimes asserted that we cannot have too much capital formation, because every added unit of equipment magnifies the productive power of human labor. It is no doubt true that a bold and ingenious people cannot set any limit to the amount of capital that they will ultimately need. But if their dreams are wisely blended with hard economic sense, they will be careful to adjust the current rate of capital formation to the rate of consumption that will keep capital plant utilized at the highest practicable capacity with the greatest practicable steadiness. It is not much to the credit of our business genius or our economic understanding that, after accumulating the capital needed to erect factories, office buildings, power and transportation facilities, we have used them to only 80 or 60, or even 40 percent of capacity a few years later.

Some of these maladjustments have, of course, been the obviously distorted growth induced by pressures of war. Such are the excessive facilities for shell making and loading, for ship building, and for assembling airplanes and rolling aluminum sheet left us by the Second World War. Sometimes the local overinvestment has been due to the excesses of a competitive drive, as in the building of the Western Pacific Railway across the Great Desert within a stone's throw of the Union Pacific or the multiplication of swank hotels in many a resort town.

Local maladjustments of this sort are often corrected by reorganization and scaling down of capital structures, possibly joined with a tightening of operating and sales management. The need for such adjustments is merely a challenge to individual enterprises and not of national concern when they occur sporadically over a period of time. But when plant building outruns market building on a somewhat general scale, inability to move the expanded product promptly into consumption results in inventory accumulations and tentative cut-backs of production, which become cumulative as payrolls shrink and wage earners' apprehensions rise. When the banks become fearful and begin crowding for prompt liquidation of indebtedness and curtailment in extensions, the course of spiralling recession soon gets under way.

But this description of cyclical depression does not mean that the process is inevitable. Nor does it mean that the term "boom" is synonymous with a period of maximum production. It merely means that in the past we have allowed maximum production, which is a desirable thing, to be accompanied by other phenomena which were neither desirable nor necessary. The truth is that, barring honest and pardonable errors of judgment as to the direction or proportioning of investment and a certain amount of unscrupulous promotion, capital formation even in our most exuberant boom times has not really been too much for actual consumer desires which should be satisfied in a rich economy. Instead, there have been enlargements of industrial and commercial capacity at costs which were disproportionate to returns which the operators were able to realize through the disposition of output within the purchasing power of the total market with existing income patterns.

This situation has not represented true overproduction, measured either by the wants of consumers or the opportunities of technology. The "overproduction" has been purely relative to the web of cost-price-spending-investment relations which were set up. In short, maximum production requires not only that we provide the best possible equipment for workers' use, but also that we keep our ability to absorb the enlarging flow of product in step with the rate of capacity enlargement. This in turn depends upon our sagacity in seeking and our promptness in making the appropriate price and income adjustments. For with these adjustments, the demand of our people can keep pace with maximum supply.

#### THE LABOR ASPECT OF MAXIMUM PRODUCTION

In our opening section, it was said that maximum production is the result of full opportunity for labor, applied under conditions making for high efficiency. With a given condition of natural resources, maximum production would require a large and high-quality plant and equipment to give greatest efficiency to the efforts of labor. We left the question of size of the labor force and quality of its performance largely

in abeyance, merely starting from the objective stated in the Employment Act, "useful employment opportunities for those able, willing, and seeking to work."

Working people, however, have very definite ideas as to the conditions under which they will work or the kind of "opportunity" they will seek. Those ideas and the labor practices that follow from them importantly affect the "maximum" to which production will attain even if adequate working plant is available.

The first of these issues concerns who shall work. In evolving our ideas as to what maximum of production we consider desirable, employees, employers, and public sentiment have progressively curtailed the labor force by restricting child labor and by better provisions for the retirement of the aged. On the other hand, we have expanded the labor force by systematically developing opportunities for the efficient use of women's labor and through the better utilization of the physically handicapped.

Along with better physical and intellectual development up to the time of entering employment there has gone better training and supervision on the job and much better understanding of proper selection and placement. There has also been greater attention to safety, proper lighting, comfortable working conditions, and general morale. The basic conditions for labor productivity have been greatly enhanced. With the further progress of mechanization and the development of automatic processes likewise, demands on physical fitness have become less exacting. The "deadline of 40", characteristic of the early machine age, has largely disappeared or been moved up. Workers can continue without undue decline in productivity under modern working conditions to much greater ages and enjoy the security of much better financial provision after retirement.

The average productivity of an hour's work has tended to be enhanced also by the shortening of the working day or week, thus permitting men to work at top efficiency during the time they are actually employed. As to continuity of work, there has been, in recent years, a considerable demand for guarantees, or at least effectuation, of year-round employment. In addition, workers have been demonstrating an increasing disinclination to accept triple or even double shift operations. This is significant in that it raises the amount of capital necessary to bring plant and equipment to the adequate level.

Industrial accounting and medical science have both made immense contributions in recent decades toward the evaluation of what kind of working conditions will add most to maximum production in the short run and in the long run. We are now far from the time when the suggestion that a 40-hour week would be more "efficient" than a 60-hour week would have been looked upon as radical nonsense. Management, labor, and the public are in a constant process of arriving at

more general agreement on this subject. They are also in agreement that "efficiency" measured by dollars and cents is not the only test. Regardless of dollars and cents, were the choice between wearing out machines before their time and wearing out men before their time, the former alternative would be desirable.

Looking to the future, the questions calling for decisions will be more in the nature of balance between more goods and more leisure. Our economic system cannot overlook the relevance of whether work becomes more pleasant or more monotonous, more stimulating or more deadening in its impact upon the worker. No purely economic scales can be devised for the weighing of these competing values. All that economists can say is that the smooth resolution of these issues, without generating undue strife and friction which would retard our economic growth, depends upon increasing practical application of the principle that neither management nor labor has an undivided prerogative. Since both are affected by these decisions, both should share in their making.

All in all, it would seem that the general atmosphere of economic thinking within which the purposes of the Employment Act of 1946 are to be sought would for the present be that of a pattern of 8-hour day, 5-day week, and a 2-week, paid vacation. In other words, the working population would in fact be seeking the maximum production that could be obtained with 2,000 hours of work in a well-equipped and well-managed plant or office under skillful management.

But the economist has the duty to point out that a shortening of working time or a decision not to put forward the maximum of human effort for each hour worked should result only from a conscious election between the competing social values that we have discussed, and should not result from subscription to the economic fallacy that less output per person is an appropriate safeguard against "overproduction" and consequent unemployment.

This brings us to the issue of intentional restrictions of output, either by organized groups or through the informal practices of individuals. Here is a problem with which we shall have to wrestle seriously in trying to work out a sensible and satisfying interpretation of maximum production in its labor aspects. Insofar as these rules or practices are a defense against physically harmful "racing" or improper "stretch-outs" of factory assignments, the curtailment of production that may result is not incompatible with the idea of practical maximum production as we conceive it. But where they represent reaction to a fear that there is not or will not be enough work to go around, they are inconsistent with the very concept of enlarged production and real purchasing power embodied in the Employment Act.

But the statement that an undesirable condition exists does not in itself reveal the precise nature of the remedy. There can be no gainsaying

the fact that workers, as well as business managers, regard the business cycle with its severe ups and downs as a genuine part of their actual known experience. It is not enough to tell them that something is not going to happen again which they have all seen happen before—and some of them more than once—with shattering effects upon themselves and their families. While legislation of an essentially prohibitive or negative character may help to extirpate such practices as may clearly be defined as malpractices even in a given economic environment, efforts along this line run the risk of failing to see the forest for the trees. The more significant problem is to develop the psychological security which can flow only from a growing conviction that maximum production, employment, and purchasing power can and will be maintained.

This cannot be done with pretty words; it requires the formulation of concrete programs which the masses of people can see and feel. And since self-respecting, educated people will retain a healthy scepticism for plans handed down to them from above, it means that their participation in the formulation and application of these programs are the terms of their acceptance or acquiescence. Pride in the job needs to be extended into pride and confidence in the economic system of which the job is a part. The logical necessity for this lifting of sights is inescapable.

In situations more specific and isolated than the general problem, there are certain groups of workers who may find themselves confronted with unemployment or with a search for a lesser job at lower pay through technological change. This may lead them toward resistance to labor-saving innovations as an act of self-preservation. It is not a sufficient answer to these workers to say that, if they succeed in their efforts toward self-preservation, society as a whole may lose more than it gains in the long run or even in the short run. We value the individual as well as the group. It follows that the burdens or set-backs necessary to progress should not fall with undue weight upon a relatively small number of people. The first step toward breaking down the resistance to technological change, therefore, should be toward convincing those who, in resisting, are making a mistake even from the viewpoint of their own personal interests. Or, if the facts do not justify that conclusion, they should have feasible alternative methods of maintaining their standards of living. In an economy committed realistically to the maintenance of maximum employment opportunities, this problem would shrink to easily manageable proportions. Even in such an economy, its complete solution will require effective programs of job placement, retraining, retirement, and adequate social insurance.

In essence, cooperative efforts of labor and management to reduce or remove restrictive practices are inseparably connected with their joint and several contributions toward maintaining an economy of maximum employment, production, and purchasing power.

MANAGEMENT AND THE PROFIT MOTIVE AFFECT THE LEVEL AND  
CONTINUITY OF PRODUCTION

We have spoken in earlier sections of this report about the role of the employer or of private business as supplier of capital with which labor may be efficiently employed. Something more needs now to be said as to the role of business management in determining not merely the size of the capital plant but also the fullness and continuity with which it is used, once it has been provided.

It is common to refer to our free enterprise system as operating in response to the profit motive. Often this explanation is applied indiscriminately to the whole process of saving, investment, and utilization. In fact, however, there are three kinds of motivation that need to be distinguished within this general area. We shall need to understand them better and direct them more wisely if business management is to bring about maximum production in a free society. They may be called the provident motive, the profit motive, and the protective motive.

To some extent the process of saving takes place in response to the profit motive. This was particularly true in the pioneer days of modern industrialism when capital was so scarce in proportion to expanding opportunity that returns were high, whereas the average income of the people was still so moderate that saving involved real sacrifice. But even then, and still more today, the desire for profit is subordinate to the wish to secure future satisfactions by deferring present consumption.

The self-respecting and responsible individual in civilized society divides his concern quite fairly between the moment's satisfaction and provision for later years. Saving something for the future provides for the growing needs of his family and for his own old age or earlier misfortune. Even without prospect of profit, this kind of saving could go on extensively in a free-enterprise society in which the general level of income among large numbers of the people is high enough so that there is a fair margin above the provision of mere day-to-day necessities. Certainly we know that the flow of funds into savings banks, insurance companies, and Government savings bonds does not cease just because their yield declines.

Business management also operates in response to the provident motive, and corporate earnings in large volume are plowed back into business by managers who feel that technological progress must be maintained and the company enlarged to provide for the needs of a growing population or that the company may maintain its place in the industry even if little or no added profit results. In effect, management thus does saving for the stockholder.

To draw capital into new lines of production, particularly for small innovating companies, management, however, has to rely largely on the profit motive and encouragement of the spirit of venturing enterprise.

Hence the assurance of especially favorable conditions for profit making to small business and new enterprises must be a matter of deep concern in our endeavor to bring about an economy of maximum production. The more conservative students of the problem propose relief from taxation. The bolder spirits flirt with ideas of relaxing credit rules so that institutional lenders can employ their funds as venture capital, or even with the idea that we may need a whole set of new financial institutions, with or without Government financial support, spread over the country for the special purpose of providing small and growing businesses with equity capital and a variety of managerial services. Because of the large size to which these trustees of provident savings have grown, they can operate under the law of averages, which reduces their actual risks to a low ratio. They can also employ technical and administrative staffs of such competence that their selection of clients constitutes a highly skillful service in allocation of capital to the most productive uses. Finally, there is the suggestion that government make nonrecourse loans or underwrite the newcomer's market. If such an undertaking could be efficiently organized, it would spread risk over a still wider area and lessen its local impact.

The issue takes on great importance because of an increasing indication that the growth of very large corporate units enables them to operate on a profits basis which is unfavorable to a rate of entry and survival of new ventures needed for the healthy growth of new jobs and the maintenance of maximum production. In other words, the profit motive has in somewhat alarming ways given way to the protective motive.

"Self-preservation is the first law of nature" and business managements are expected to use every legitimate device to protect the companies over which they preside. But the evolution of our industrial society has brought about conditions in which the attempt to protect the individual company and its shareholders results in widespread disaster to other companies and prolonged depression of the economy as a whole. This is so contrary to the purposes of the Employment Act that it must become a matter of continuing concern to the Council of Economic Advisers.

The operation of the protective motive produces restrictionism from the side of management which is far-reaching as an impediment to maximum production over the long run. It means that management develops systems of cost accounting, of reserve accumulation, of margin setting, and of pricing that result in cessation of production and withdrawal from the market as the basic means of weathering economic storms. There is no occasion to recite the familiar sequence by which curtailment by one company reduces the income of workers on its pay roll and so starts and accelerates the disastrous spiral of recession. It is important that we enlarge the present state of our knowledge so as to permit the outlining of business practices through which this recurring danger to our economy can be met.

But it is proper and necessary to close this discussion by pointing out that the protective motive as practiced in recent decades creates a perennial threat to the maintenance of high production. We are approaching day by day the testing time when we shall see whether or not voices of reason in the ranks of management will enable them to avoid a stampede into a disorganized scramble for individual safety, each company for itself "and the devil take the hindmost." It will test our economy also to see whether, where individual stabilizing actions reach their limit, we can use Government as a coordinating means toward achieving these ends. If the swings from expansion to contraction of private business which we have had in the past were to continue, offsetting operations would be too big to be left to "compensatory" Government policies. Economic stabilization can be achieved within our private enterprise system only if management accepts the responsibility for a more stable practice in planning its investment and operative programs.

Hence, if we are to achieve a more continuous utilization of the Nation's resources, material and human, than the disorderly operations of the past through a series of booms and collapses, management must accept the attainability of the purposes of the Employment Act. There must be a belief on the part both of labor (as was said in the section on labor's part in the achievement of maximum stabilized production) and of management that those purposes represent a goal attainable by a nation of economically intelligent and well-intentioned citizens. In the working out of such a belief in practice, labor and management must in cooperation reform their operative practices and their methods of dealing with each other.

Future work of the Council of Economic Advisers will be directed to the exploration of these possibilities. In the closing section of this report, however, we outline briefly the form in which we believe the issue will present itself in the near future.

#### MAXIMUM PRODUCTION MUST BE PROPERLY BALANCED

Thus far we have been talking of maximum production in the general terms of a total quantity. Nothing has been said as to: Production of what? In fact, however, the make-up of the output is a very important matter.

This would not be the case in a primitive society, where wants were few and consumption but little varied. To maximize their production, the men of a primitive culture would simply produce as much as possible of a few simple food, clothing, and housing necessities.

But in a rich industrial nation such as ours, we have gone far beyond this simple condition of filling the belly and covering the back. Our enlarged productive powers permit us to supply a great number of cultivated wants which have grown with the years. At every step in our

advance from the primitive to highly productive scientific and capitalistic society, additional types of production have given refinements of service to our eating, style and beauty to our clothing, great advance in convenience, safety, and attractiveness to our living quarters, better care of our bodies and our minds.

But these ampler and finer products, while in some degree reaching most groups in the population, have in large measure gone to the relatively few who by wealth or position could claim the cream of our productive operations. Large numbers of the people have gone on subsisting on skim milk. Even in times of business depression, those at the very top have been able to maintain their standard of living unimpaired out of their accumulations of wealth or because their sheltered incomes were continued even during periods of widespread unemployment. The bottom quarter or third, on the other hand, have not risen to satisfactory standards even during periods of highly productive activity. And it is they, of course, who have dropped to the lowest level of consumption during periods of arrested production. We have still not really studied and aggressively dealt with the question of what a rich country can afford to do when it keeps steadily at work.

In progressive and democratic countries like the United States, growth in productive power has been accompanied by—and in fact has been largely dependent on—the passing on of more goods to more people. This has been achieved through a double process of enlarging mass incomes and lowering prices of mass-produced goods. The challenge that is presented to us now is to recognize the full measure of our productivity, which was seen only in rather distorted terms during the war and was sadly obscured during the depression that preceded. It we are to achieve and stabilize maximum production according to any reasonable interpretation of America's capacity to produce, we must in future have much higher consumption in all the lower and middle ranks. The small number of the well-to-do will not be able to absorb the possible output of consumers' goods. Nor can they go on indefinitely accumulating ownership of the surplus above their consumption needs and investing it in ever-enlarging plant for future expansion of goods for some restricted part of the population. The enlarging production of an industrially efficient nation must go increasingly to filling in the consumption deficiencies of the erstwhile poor. Their labor has in fact become highly productive under the well-equipped and efficiently organized economic system of today, and if this great productivity is not reflected in their patterns of consumption, the system itself will become clogged and fail to maintain maximum productivity.

It is no answer to say that this increased productivity of the rank and file worker should not be used to raise his real income because he has done nothing to bring about this greater productivity; it has been contributed by the injection of more and more capital. Two points may be

made in response to that assertion. First, the point of equity is not impressive if we recall that the accumulations of capital over the years have in fact involved deprivations of the rank-and-file worker. His children may now with reason expect to benefit from the fruitfulness derived from that contribution. But second, and most important, is the strictly operational point that whether or not the worker is entitled in any abstract sense to the enlarged product, the system cannot go on progressing or even functioning efficiently unless its expanding product goes to all potential consumers. In a rich nation, the gap between the actual consumer satisfactions at the top and the bottom is bound to narrow. Real wages rise, whereas the rate of return on capital would normally fall in response to competitive forces as its ratio to the number of workers rises.

TO ACHIEVE ITS MAXIMUM, PRODUCTION MUST ANTICIPATE CONSUMER  
RESPONSES

Maximum production, like maximum employment, is a complex term. Just as the effort to define maximum employment must strike a balance of individuals' preferences between work and leisure, so maximum production must strike a balance of preferences between the public's desire for one type of goods and its desire for another type of goods. In the final analysis, whether we increase the supply of houses more rapidly or more slowly than we increase the supply of marginal house furnishings such as radios and television sets, is or should be a matter of consumer needs and preferences. Even with abundant purchasing power, the execution of a bold design for maximum production depends upon getting as much insight as possible into consumers' real desires and relative preferences, since these determine the willingness of buyers to release their dollars on the market—and to go on working to get more dollars. This tells the producers where to go forward and where to hold back.

It is not enough to say that our private enterprise system will be so aware of consumer desires that it will automatically build up the appropriate productive facilities, confident that a remunerative market will be forthcoming, and that this in turn will enable producers to supply the employment opportunities out of which the necessary consumer incomes will be generated. To an extent this is true, but we cannot afford to assume that it will be so completely true that we shall move from the high activity of the present period on to a sustained level of production in which our resources are adequately employed year in and year out.

In recent years, there is evidence that due to the "roundabout" methods of production, requiring heavy investment in capital equipment to produce goods for markets remote in time and space, serious imbalance of supply and demand often results. In other words, the so-called free market is neither as responsive nor as dependable a guide to production as it was in a simpler economy.

Practical businessmen and analytical economists have never been quite able to decide on the true relationship of production and consumption. Which came first—the hen or the egg? Naturally, we must produce before we can consume. But it is the urge to consume that sets us at work producing. With the growth of large, complex, and round-about processes of industrial production, the consumer certainly does become a less direct personal determinant than he was under simple conditions when the hunter went out to kill the meat for his dinner and provide the skins and furs for his clothing. The producer undertakes provision of what experience or analysis leads him to believe he can persuade the consumer to buy; he speculates as to the demand and assumes the risk of an uncertain market. Then the worker seeks a place to sell his labor to get the dollars to buy what he wants or can be sold. The enterprising producer both stimulates and guides consumers.

In facing the question what kinds of product in what relative amounts might be forthcoming from a state of maximum production, careful consideration must be given to how consumers have responded to the past conditions of growing productivity and how they might respond to the possibilities of still larger production in future. Even for those who have been in the better-supplied groups in past years, there have been curious gaps and irregular areas of expansion, reflecting the popular response to enlarging, but not unlimited, opportunities.

Notable has been the strong emphasis placed on having personal transportation facilities. The ownership of a horse and buggy never fired the ambition and modified the expenditure pattern of American families in general, as has the automobile. In fact, the cost of a car—a pretty luxurious car—rapidly came to absorb so much of the income of the wage earners and farm families that standards of domestic housing, comparatively considered, tended to lag.

To some extent, likewise, and among certain groups of consumers, pleasing and relatively expensive items of clothing were likely to outrank the older standard requirements of food as well as housing. America became a strikingly well-dressed country, but many a working girl sacrificed proper diet to having nylon stockings or a fur coat. At the same time, there have been competing urges. Pride in having good looking teeth, the need for preserving eyesight for exacting factory and office jobs, and the growing knowledge of nutritional principles have tended to protect standards of health against encroachments by less essential types of expenditure and have made workers anxious to get additional income for the satisfaction of these wants, thus in turn increasing the market demand for production of these types of goods.

We are still in a somewhat abnormal, certainly unstabilized, type of production activity, in which we are making up the deficiencies in durable goods, particularly consumer durables, which had accumulated during the war period and the preceding depression. Present production

likewise is going into military preparedness and foreign aid to an extent which would not be found in a true peacetime economy. We might continue maximum employment and high production on these somewhat artificial props through 1948 or even longer. But it would be improvident for us to fail during this interval to consider soberly and to provide prudently for the pattern of reciprocally balanced consumption and production which could reasonably be expected to become established thereafter and which could be maintained on a stable basis.

How many automobiles can we really live with, and how much rebuilding of streets and highways will that number call for? How much personal transportation by air will be given preference by the rising generation to other kinds of satisfaction? Will the total package of market goods and services of a maximum production economy require more pounds of steel per capita or will soft goods or even intellectual and artistic pursuits play a larger part?

This sort of economic exploration is being done by individuals, industries, and public agencies, each according to its lights. One of the most comprehensive areas of such study and planning is probably that in the agricultural field. Individual producers are adjusting herds, planting orchards, erecting buildings, and preparing for future operations in accordance with their individual judgments as to what sort of an agricultural market may be expected in the years ahead. Their decisions and commitments are entirely within their own hands, but they have the benefit of broad professional analyses and general advisory guidance from a widespread system of agricultural extension and experiment station agencies. All this local study and preparation in turn is loosely coordinated into a national system through the consultative arrangements of the Department of Agriculture, pointed up in a series of annual (and some special) "outlook" conferences.

In general, we must be asking ourselves, has agriculture become over-expanded in responding to the demands of war and of European reconstruction? If so, how much and in what directions? Many people are apprehensive of an era of agricultural "surplus" after Europe's farms have got back into their stride and world-wide transportation has been fully restored. On the other hand, the war and postwar years have given us a new and larger realization of the enormous amount of farm product that a fully employed and well-paid industrial population will demand. Beef steaks are habit forming, and butter and fluid milk claimed many addicts among men and women in the army and navy or among civilian workers tasting new food satisfactions on a riveter's pay. It seems much more likely that a maximum production economy would build up a flow of industrial goods and varied services ample to trade on a satisfactory basis for the whole product of a farm plant and personnel of its present size than that agriculture would need reduction. If the equilibrium of maximum production is found by the expansion of nonfarm

goods and services rather than by cut-backs of agriculture, we shall see a great tide of better furniture, household appliances, telephones and electric lights, farm machinery, automobiles, and amusement facilities moving out into the barer rural communities. This should be a field of vigorous study and promotion by industrial and commercial concerns as the holiday of their present seller's market draws to a close.

One of the most intensive areas of consumer analysis and production planning is that of our telephone system, where scientific studies of future demand are continuously under way and as these are in turn coordinated and to some extent implemented by the national staffing and financing of the American Telephone and Telegraph Company. Likewise, power utilities—local and regional—are making extensive studies and preparations for meeting prospective needs. Their task is somewhat simplified by the fact that demands for their services are relatively stabilized because of the day-to-day necessity for using water, light, and heat, and the fact that, once a given type of installation has been made, there is little flexibility in substituting another type of service.

As we move into the industrial area, we see in progress the same sort of attempts to gauge the volume of production which would be called for under hypothetical conditions in the future. We find a considerable range between items like food, which have a relatively stable demand even in times of depression, and luxury and postponable items which may fall off sharply if unemployment becomes extensive. Here is the crux of our problem of maximum production. The economy will be largely stabilized if these industries adjust their capacities skillfully and promptly to the reasonable possibilities of a sustained maintenance load, as the distortions of the present situation are overcome.

Here, for example, the automobile industry is now confronted with the task of working down the backlog of war-deferred demand. This involves a problem of reconciling the rate at which this demand should be satisfied with the claims of other industries (and the foreign aid program) for resources during a period of relative shortages. But even more importantly, from the long-range viewpoint of sustained maximum production, it involves the question of whether the automobile industry should try to work down the backlog at the most rapid rate that it possibly can, or whether such a procedure would "saturate" the market within a few years and lead to a sharp and serious contraction of a key industry.

Insofar as an industry of this type now produces below its maximum potential in response to a sound analysis that this is required for stable and healthy growth, assuming that the economy as a whole will continue to enjoy stable and healthy growth, such a procedure is entirely justifiable and presents challenging problems of market analysis. But insofar as any industry restricts its current output or its plant expansion, not because of a fair appraisal of its role in a future economy operating at maximum levels, but rather because it assumes that our economy in the future must

again undergo "seven lean years" even as in the past, the pursuit of such an economic philosophy by any of our vital industries would help to engineer the very downswing of the business cycle against which it seeks to "insure" itself.

The first prerequisite for maintaining continuous high levels of economic activity is that our business leadership accept this as an attainable and necessary objective, and act wisely and vigorously within the framework of such an assumption. This involves not only decisions within individual industries, but also an appreciation of relationships among industries. Rates of steel production and highway building, for example, would obviously need to have a harmonious relationship to the scale of stabilized production in the automotive and the steel-using industries.

Residential construction in the current scene affords an example of a different type of problem in the process of sustaining maximum production and the maximum purchasing power that must go with it. While we are now producing housing at an extremely high rate, measured by any prewar standards, this production, as in previous periods of a homebuilding "boom," is concentrated almost entirely on meeting the needs or desires of those in the upper income brackets. To the inadequate extent that current home building is also serving families of lower income, it is doing so at a relationship between the cost to them and their incomes which is piling up economic problems for them in the future, and which does not augur well for sustained high levels of housing production when the thin luxury market is saturated and when the biting edge is taken off the current shortages.

Housing affords perhaps the best illustration of the need for much keener market analysis, and for a much more realistic pricing, so that maximum production may be sustained. Estimates of the peoples' housing needs, including the rural areas, range up to a million and a half or even more units per year on an average over the next 10 years. We unquestionably have the productive capacity to meet these needs; the problem is to develop the economic arrangements which will release this productive capacity in full.

Similarly, we need now to resume the forward march of our system of universal education, arrested or indeed set back so severely during the war and depression years. We have the resources also to bring to large fruition the plans of health care, the correction of physical defects, and the attainment of modern standards of nutrition which have now been so amply demonstrated on the "pilot plant" level. It is high time to put these welfare goods into mass production.

#### PRIVATE PRODUCTION, PUBLIC DEMAND, AND THE ROLE OF GOVERNMENT

The Employment Act of 1946 in its declaration of policy explicitly embodies the proposition that the system of free competitive enterprise in

which we live is to be maintained. This intention is implicit in the whole structure of the act and was emphasized throughout its legislative history. The Council reaffirmed and expounded this philosophy in its first annual report and has emphasized it at many points in this report.

But the Employment Act does not limit its purposes or our responsibilities to the carrying out of this intention. The declaration of policy in the Employment Act likewise affirms—

the continuing policy and responsibility of the Federal Government to use all practicable means consistent with its needs and obligations and other essential considerations of national policy \* \* \* to coordinate and utilize all its plans, functions, and resources, for the purpose of creating and maintaining \* \* \* conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power.

This statement *per se* does not involve precommitment to an expanding role for government at the expense of voluntary initiative. But it does involve frank recognition that the government accepts a complementary role in areas where, or in times when, private enterprise fails to provide adequate productive use of the Nation's resources.

From our economic analysis of sustained maximum production, we have concluded that we have reached a state of the industrial arts where the full utilization of our resources makes possible and will call for the increasing enjoyment of satisfactions that go beyond merely "keeping body and soul together." The expectation that keeping our resources vigorously and steadily in use would give us not merely more adequate food, clothing, and shelter for the lower ranks of workers, but also reveal much reserve productivity to raise the level of health care and culture activities for all but the present top income layers, who are already well supplied, raises the question of how far private enterprise will cultivate the total field and particularly this latter area.

The United States has never barred private enterprise from running private schools, from law and medicine to dancing and modeling. We have never, except in time of war scarcity, deterred private promoters from developing any legitimate amusement enterprise. Nor have we barred private physicians, dentists, or oculists from developing the private practice of their profession, provided they met suitable standards of competence formulated by their own craft. On the other hand, in none of these areas has the public enterprise of local community, state agency, or the Federal Government hesitated to step in to organize facilities through which any one of these services would be rendered the public more amply than unorganized individuals or organized firms had been able or interested to supply them.

The point of our question, therefore, becomes this: Will private physicians and non-governmental hospitals, will schools and training agencies outside the public system, and will commercial ventures in music, art,

drama, radio, and recreation attract a sufficiently rapidly expanding personnel and provide sufficiently enlarged facilities so that the satisfaction of wants in these areas, superimposed on those which have been more exclusively the area of industrial and commercial activity, bring the level of total activity in the economy up to an acceptable total of maximum production? If not, is it reasonable to expect that we shall channel more of our resources and derive more of our satisfaction through Government agencies in these areas? We must then find ways of developing them no less prudently and operating them on the average as efficiently as the much larger area which we may hope will continue to be organized and operated through the agencies of the private market.

Transportation is another area in which a substantial measure of governmental participation has become traditional. The history of our improvements in transportation strikingly proves the case that certain public activities, far from competing with private business, are indispensable to its operations and give mighty impetus to its progress. Notable at the present time is the strong and legitimate desire to have both local and central governments move to establish municipal airports and an over-all system of regulation of air traffic. Actual transportation service by air is left to private enterprise, and popular sentiment has called for Government patronage and several forms of financial aid so that the service might be developed more amply and rapidly than it could be through sole reliance on the commercial rates which the traveling and shipping public could or would pay.

Similarly, both manufacturers of highway machinery and roadbuilding supplies on the one side and bus and truck companies and farmers and tourists on the other have been ardent proponents of the hard roads program. While both the building and the using of the roads remain in the realm of private enterprise, the economic leadership in developing these enlarged areas is the connecting link for which public action provides the most adequate agency.

Perhaps the most important of the new frontiers of private institutions in step with complementary Government action is the field of urban redevelopment. Many of our cities and towns are outmoded in whole or in part. There have been telling dramatizations of the social consequences of this. But we are only beginning to probe the depths of the economic consequences, such as the effects upon property values, local tax structures, and institutional investments. Yet there is an almost universal realization that no single investor or group of investors can bear the cost of writing off this obsolescence at a sufficiently rapid rate. Some writing off does take place, it is true, through reorganization, recapitalization, and shifts in ownership. But adjustments of this kind are inadequate from the viewpoint of increasing our national wealth or releasing truly productive energies.

The application of some Government resources at all levels to the preparatory stages of urban redevelopment would have an extraordinary leverage effect upon opportunities for the private employment of men, money, and materials. Just as the hard surface road accelerated the automobile industry, and the automobile industry in turn touched so many points in our growth after the First World War, so an appropriate exercise of public initiative in urban redevelopment could serve to touch off varied economic developments of almost incalculable proportions.

In our first report, we indicated profound scepticism as to the theory that government spending should or could effectively be used to make up for huge deficiencies in employment and production caused by periodic break-downs of the economic system. This did not mean rejection of the sound principle that public works should be accelerated or retarded somewhat to counterbalance the mild fluctuations in the operations of business which will occur periodically despite our best efforts. But it did mean that we consider the primary purpose of public works to be the provision of services that cannot otherwise be supplied. The offsetting of fluctuations in the business system, which is a secondary purpose, can be achieved only if these fluctuations are held to manageable proportions. We emphasize again that government economic activities should be carefully designed to add to the resourcefulness, the productivity, and the growth of our business system as a whole instead of being regarded mainly as a device for applying poultices to that system when it becomes infected.

Other economic policies of government, such as taxation, regulation, and international trade policies should be conducted in a manner which, consistent with the attainment of other national objectives, shapes these policies to the promotion of health and growth in our business life. No principle is more firmly embedded in the Employment Act. No one—"conservative" or "liberal," businessman, worker, or farmer—quarrels with the urgent need for this enlarged perspective within which the evaluation of governmental policies should take place. Depending on circumstances, this may mean more government or less government. But in any event, it will mean better government, more economical government in the true sense of that much abused word.

To conclude this discussion of the bases of maximum production, the whole congeries of mixed private and governmental efforts will not add up to continuous maximum production unless our business system itself functions increasingly well. This better functioning toward maximum production, and the more adequate consumption that goes with it, depends on the maintenance of certain balances to which we have allotted most of our discussion in this report. These include the balance between capital growth and consumer consumption of goods and services; the balance between work and leisure; the balance between output and absorption, or between supply and demand, which can be achieved only through ever-improving management of the wage-price-profit structure

by those who shape it; and the balance which depends upon economically efficient distribution of national income not only between producers and consumers, or between employers and workers, but also between industry and agriculture and among the various sections of the country.

Although those who operate our business system will continue voluntarily to make the decisions that add up to or subtract from the various essential economic balances, it does not follow that any individual or group alone can acquire the perspective and sweep of view over the whole economy which would enable them to synchronize and coordinate their efforts with those of others. The Congress clearly recognized this in requiring that the President in his annual Economic Report to the Congress should state "needed levels" of employment, production, and purchasing power. In discharging this responsibility, the Chief Executive exercises some leadership, but these needed levels cannot be dissected and defined and amplified without consultation and advice from businessmen, workers, farmers, and consumers. This is necessary not only to decide what the Government should or should not do, but also to make available working forums in which these groups may meet together and come to better accords as to what they themselves can and should do.

In the pursuit of its clearly defined responsibilities under the Employment Act, the Council fully recognizes that the tasks of economic analysis which it is called upon to perform require more study, more exchange of views, and further improvements in the tools of economic and of political science. We anticipate that in succeeding reports we may bring more exact measurements and refined judgments to bear upon the key issues that we have here disclosed.

### III. Maximum Production Would Involve Real Price Competition

Our review of the meaning of maximum production and means of attaining it has touched on the parts played by natural resources, created capital, labor effort, and managerial direction. It has emphasized the basic role of private enterprise and the complementary role of government action. In accord with the national purposes declared in the Employment Act, we have stressed the objective of continuous and well-balanced use of the Nation's productive resources as against short-lived booms of unbalanced overexpansion and overcapitalization, with neglect of prudent measures of conservation, these booms being followed by wasteful periods of unemployment, plant idleness, and demoralizing liquidation of property.