is reason to believe that a federal deficit of considerable magnitude is in order. I believe it is doing a disservice to assure the public, as some liberals are trying to do, that a tax cut will only be temporary; that the boost which the economy will get from this "shot in the arm" can be so great that tax revenues will quickly balance the budget. Unforeseen developments, as just noted, could indeed produce this result. But we have no right to assume that they will take place. On balance, what is known about the multiplier and acceleration-effect of a tax cut, together with the probable marginal tax take of any incremental addition to the GNP, suggests a possibility of recovering in tax revenues around one-half to two-thirds of the initial loss incident to the tax cut. Thus a $10 billion tax cut might well add on balance (once the very short-run effects have run their course) only $3 to $5 billion or so to the deficit levels of recent years.

Americans are quite prepared to use credit to finance long-term family expenditures. Bond issues are taken for granted to finance state and local capital outlays. Private business would never think of charging investment outlays to current account. Only in the case of the federal government is the use of credit taboo.

How does one explain this irrational behavior? The answer is that those who oppose any expansion in the role of government have found the balanced budget dogma to be a powerful propaganda device. We hear much about "fiscal irresponsibility." In fact, it is the budget balancers that are fiscally irresponsible: an annually balanced budget would enormously accentuate the fluctuations of the business cycle. A compensatory fiscal program which balanced the budget over the cycle would indeed help to iron out fluctuations, but the economy might nevertheless drift farther and farther below the potential growth curve. Had the budget been balanced over the last five years, the country would very probably have suffered a considerably wider departure from full employment. Fortunately, in fiscal policy matters we act a bit more sensibly than we talk.

ALVIN H. HANSEN

How To Judge Quality

As a general formula, the desirability of as high and sustained a growth rate as is compatible with the costs that society is willing to bear is valid; but in using it to judge economic problems and policies, distinctions must be kept in mind between quantity and quality of growth, between its costs and return, and between the short and the long run.

The distinction between quantity and quality can be illustrated by the components of the Gross National Product, an estimate widely used to gauge the total performance of the economy.

According to the July, 1962, issue of the *Survey of Current Business*, the GNP was $519 billion in 1961. Of this amount national defense accounted for $49 billion, or over 9 percent. In other words, about that much was *produced* for national defense purposes. Now assume that over the next seven years total product increases at the rate of 4 percent per year – a much higher rate than the 3 percent attained over the last seven years – and production of national defense goods triples. By 1968 Gross National Product will be $683 billion (in 1961 prices), defense outlay on goods will be $147 billion, and the remainder, $536 billion, will be about 14 percent over the 1961 level. This would mean only a slight rise in per capita consumption and capital accumulation.

The higher rate of growth indicated by this example would, in a sense, be genuine, since the economy would have managed to turn out that much more for national defense without reducing per capita consumption and capital formation. But it would hardly be a desirable type of growth, and presumably should be avoided if possible. No one would welcome an acceleration of the over-all rate of economic growth that was associated primarily with a marked increase in defense expenditures – at best a necessary evil, but still an evil.

The desirable qualities of economic growth are not as easily established as this simple illustration suggests. Every American, after some reflection, could produce a list of desirable contents of economic growth, omitting the vulgar, the frivolous and the dangerous. But individual judgments differ and a social consensus must be sought on what is needed and desirable. How such a consensus is to be attained, and particularly how it is to be made more intelligently responsive to rapidly changing conditions, is a problem that should be of continuous concern in a democracy. Only two comments can be made here.

First, in its evolution, economic analysis has departed more and more from the rigid conceptions of economic laws of the private market economy that characterized it in earlier and more "classical" days, and has moved toward more flexible adjustment of economic mechanisms to changing needs and priorities, with increasing room for participation by the state and public institutions.

Second, given the variety of qualitative content in the over-all quantitative rate of economic growth, objectives should be explicit: goals for "more" growth should specify more growth of what and for what. It is scarcely helpful to urge that the over-all growth rate be raised to *x* percent a year, without specifying the components of the product that should grow at increased rates to yield this acceleration, the needs and priorities that are thus to be satisfied, and the costs that may have to be incurred to assure such returns. If economic growth is to be more deliberately geared to what is wanted, effort must be exerted to formulate a consensus; or, still better, continuously to formulate and reformulate it in response to changing conditions, and with sufficient flexibility to allow for deviant innovators.

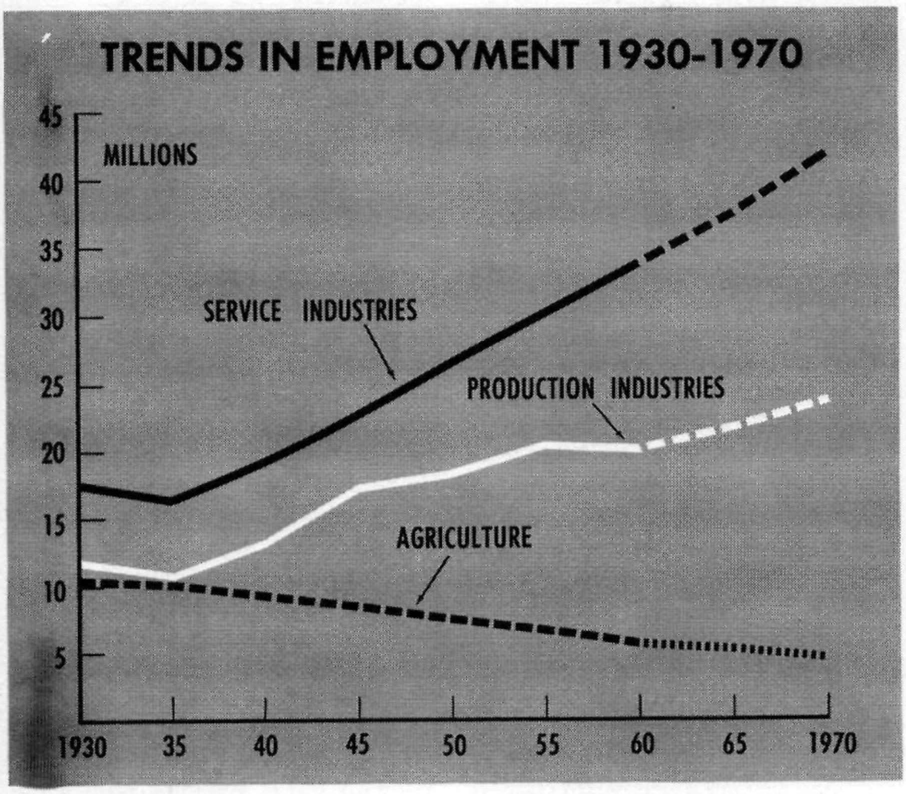
Economic growth involves a variety of costs that must be recognized.

Some are direct, such as additional input in capital investment and human training. While returns are often estimated net of current input of at least material capital, such input must be made; when made it is thereby unavailable for other desirable uses. Another more subtle direct cost is the adjustment of social institutions, of patterns of human life and work, that is necessary if the economic growth potential is to be realized. If urbanization, the formation of large and impersonal corporations, and the shift of the labor force to employee status are indispensable adaptations imposed by modern industrialization, the costs are borne by those groups in the population who have to adopt these new patterns of life – and this is true of a host of lesser adjustments with which the government is particularly concerned in regulating the economic behavior of divers groups.

Some of these costs may be too high: such would be achievement of economic growth by curbing the freedom and consumption of members of the society as is done by authoritarian governments that instill fear and hatred of some presumably powerful foreign enemy to goad their people to more work and to acceptance of reduced current consumption and freedom. But far less drastic modifications of cherished social practices which might contribute to greater growth may be delayed indefinitely because the change and the cost are not acceptable to those with the power to make them.

A second type of cost of growth is the loss in relative, and sometimes absolute, position of industries, occupations, regions, that are either adversely affected by the competition of more rapidly growing industries, occupations, regions, or are slow in responding to the effects of cost-cutting and employment-reducing innovations under conditions of small potential growth in demand. The effect on the coal industry of rapid growth in oil and other fuels is an example of the first type of impact; overproduction and its incident problems in agriculture are an example of the second type. In both cases costs reflect the difficulty of rapid adjustment to changes in market conditions that are a result of economic growth elsewhere or of growth in productivity within the sector itself. In either case failure to adjust means continued employment of resources below their potential; even, in extreme instances, to the point of total unemployment. These are costs not only to the groups affected but also to society.

If the resistance of these groups, which takes various forms, but often makes use of political power, is successful; or if considerations of economic equity justify assistance or protection (subsidies, tariffs, price maintenance), the costs to the particular groups may be reduced, but those to society are increased. Subsidies do not, in and of themselves, raise the productive performance of the recipients: the loss, compared with a more optimal use of the resources involved, still exists, and the inescapable shift is only postponed unless the subsidy is tied in with other policies encouraging mobility. Moreover, subsidies and tariffs mean resources withheld from other, possibly growth-inducing uses, and tariffs add to the problems of international relations. It cannot be denied that under some conditions the support of the purchasing power of groups adversely affected by economic growth may contribute, in the short run, to greater demand and thus to greater utilization of capacity and over-all growth. Nor should groups adversely affected by the differential impact of economic growth be left to suffer and not be helped to adjust to conditions that are not of their making. But costs are involved; the help is, in a sense, a cost of economic growth which, given in some forms, may only impede economic growth; and the incurrence and form of these costs must be carefully weighed during consideration of alternative policy decisions.



These rather obvious comments are relevant if only because of two trends in recent economic writings. One conceives modern economic growth as an automatic, self-sustaining process, once the "take-off" has been achieved; and tends to overlook the argument that if growth is to be continuous rather than self-retarding, the resistance offered successively by earlier growth industries that are becoming relatively obsolete and are affected adversely by growth elsewhere has to be continuously overcome – and not at forbidding cost. The other emphasizes the deficiency of over-all demand as a basic cause of idle resources and failure to attain desirable growth rates. Yet if deficiency of demand is an effect, not of temporary maladjustments in the productive and distributive mechanisms, but of the constant pressure of increasing productivity on the secular levels of final demand, sustained economic growth requires a stream either of technological innovations that would keep up consumer demand or of social innovations that would permit the satisfaction of needs by public agency action, thereby increasing production.

The emphasis above on what might be called the displacement or obsolescence costs of economic growth is relevant, because the way such costs are met affects the rate and steadiness of the growth process; and the experience of the older industries, regions, occupations is a clear indication that a stream of innovations, shifting from one sector to another, must continue if obsolescence is not eventually to overtake the entire economy.

In all these considerations the time element must be kept in perspective, with distinction made between the short term and the long run. The short term may be defined as the current year or two. The duration of the long run, whether the next decade or two or three, depends partly upon knowledge of the long swings, about 20 years in duration, that have affected the rate of growth of the American economy since the early 19th Century; partly upon readiness to revise thinking with the passage of time; partly upon technical constraints in the implementation of analysis of the long run, which sets limits to the time span of the nation's commitment. Whatever the precise definition of the long run, the behavior of the economy and the problems it engenders will be different for the short and for the long run. In the short run, a chief concern may be with underutilization of resources, either labor or capital; in the long run more concern may be felt with pressures upon the supply of capital funds and increasingly highly skilled labor. In the short run, the problem may be inadequacy of total demand; in the long run, shortage of growth-inducing innovations and resistance to their adoption and spread.

The short run problems always loom large. If there are unused resources and groups in distress, the problem is immediate – and doing nothing about it is also a kind of policy, not necessarily the wisest. On the other hand, the long run for the future is always uncertain. It would have been a wise prophet indeed who, 25 years ago, had foreseen the major changes in the country's conditions that have occurred and the economic problems for whose solution some preparation should have been made. And yet households, business firms and especially public agencies are continuously making decisions that involve commitments for decades; and the policies directed at current problems all have long-term consequences. Even if these are susceptible of counteraction when their cumulative impact becomes undesirable, the cost of the extra effort that must then be made may not be negligible.

Two obvious conclusions follow. First, in the consideration of alternative policies (including inaction) in response to current problems, the long-term impact must be weighed alongside the short-term effects for which the policies are primarily designed. In this light, the conservative response to current problems in a country like the United States, which has enjoyed satisfactory growth, may at first seem justified – for it may reflect a reluctance to tamper with institutions and arrangements that have contributed to desirable long-term performance. But it should not be assumed that past growth did not necessitate a series of policies which, while triggered by current problems, effected changes that permitted the kind of growth that did occur. Study of the country's economic history reveals ever-present concern – by the private sector and by the various levels of government – with the adaptation of economic institutions and practices to changing conditions and potentials of economic growth, and to changing notions of equity; and likewise the unpleasant aftermaths of periods of relative policy inaction like that of the 1920's. The long-term impacts of responses to short-term problems should be examined, but inaction would be justified only if the long-term consequences of the alternative policies are judged to be detrimental to such a degree that they outweigh the short-term benefits – an unlikely contingency, however valid it may be for one or another specific policy.

Second, implicit in the first conclusion is the growing need to allocate some attention and resources to the probable and feasible long-term course of the economy. Preoccupation with current problems and pressure to resolve conflicting notions as to best policies may cause far too few resources to be used for capital investment in learning about and acting on the long-term future. Neither the private sector, nor the government, nor the universities provide adequate institutional arrangements designed specifically for a broad continuous examination of the long-term future and timely consideration of problems that may loom ahead. With the exception of such specifics as projections of population, or of the market for some products, or of some government budgets, they do not even provide for the extrapolation forward of existing forces that may largely determine the long run.

Several problems that may loom large in consideration of the long-run implications of existing factors have been noted or implied in the discussion by other authors in this issue. Mr. Boulding's comment on misallocation of research resources between the natural and the social science fields leads me to ask whether even in research and development dealing with problems of material production, the present allocation, with its heavy concentration on defense-oriented tasks and the small share devoted to purely civilian production problems, is optimal from the standpoint of future growth. Allocation of so little of scarce creative and skilled research talent to the vast range of civilian production problems may bode ill for the future if it means an insufficient flow of innovations to assure a satisfactory rate of growth of civilian output and productivity. The comments by Messrs. Bullock and Singleton on the differences in demand for workers of high and low skills raise a major problem if the course of technological change means that the rapidly growing industries will demand only highly skilled labor, with ability and attainment far above average. The possibility calls for a thorough examination of the implication that formation of a kind of IQ aristocracy would have for wide participation of the population in productive economic activity, and suggests that effort be directed at a reorganization of the educational system and development of a satisfactory job structure for the future productive system. And the comments by Mr. Kassalow on the reasons for organized labor's concentration on the demand for shorter hours suggest a question not unrelated to that just noted – whether a longer period of training and the raising of the age of entry into the labor force, with whatever policies are needed to encourage such shifts in the face of their excessive private cost at least to the lower income groups, should not be carefully explored as a partial alternative to an over-all reduction in hours.

The number of such long-range problems could easily be multiplied. The rapid rate of modern economic growth requires rapid increases in the supply of specific resources, and policies must be aimed at accelerating such flows. And in addition there is the variety of adjustment problems caused by the displacement and obsolescence impacts that have already been noted as costs. But there is little point to extending the list. The aim of these notes is not to provide answers to a comprehensive list of properly selected and weighed problems; it is merely to stress a few broad considerations that seem useful in thinking about the growth of the economy in the past and in looking forward to the changing conditions ahead.

SIMON S. KUZNETS

Guiding Guided Capitalism

The supreme challenge to this country's economic system in the years ahead is to complete the evolution of "guided capitalism" in order to provide more successfully for generally full employment of resources and vigorous and sustained economic growth. For efficient evolution of the US economy, both broad popular understanding and intensive specialist grasp of its principles are requisite, making possible progressive adaptation of institutions and policies. Such adaptation requires review of the growing points in contemporary economic comprehension, both those that concern action programs and those that concern the theory underlying them.

Thirty years ago, government intervention in the economic process, except for policing the market through such measures as the antitrust laws, was a minor element. Today, it is taken for granted. But in the course of intervening, various types of government activity were instituted. In the perspective of history, judgments of their relative desirability can be made and serve as guides to the future. For instance: Statutory regulation of working conditions, workmen's compensation laws, social insurance and redistributive taxation and transfer payments have caused some observers to speak of "welfare capitalism"; but government action to provide minimum welfare "floors" has been largely accepted even in conservative circles. Beyond these basic minima, however, there is resistance to divorcing benefits from productive contributions, and this resistance is healthy.

Over the last 35 years, the dynamic forces of the market have produced a significant redistribution of income. In these new circumstances it seems likely that governmental tax measures should now be modified in favor of providing greater incentives for saving and investment on the part of the higher income groups. At the same time, appropriate policies to stimulate private investment should be paralleled by direct public investments in strategic areas.

The assumption by the federal government in 1946 of responsibility for generally high employment was essential for effective functioning of a predominantly free-enterprise economy. The chief further requirement is the formulation and execution of more effective policy toward this goal, coupled with and reinforced by policies designed to promote vigorous growth. Without a positive growth policy, the US type of economy tends periodically to slow down, and this "long wave" reduces the long-term growth rate – thus dampening progress toward both domestic and foreign-policy objectives.

During the depression, assumption by the government of increased responsibility for high-level demand and employment was paralleled by government intervention in market processes themselves. Direct efforts to aid farmers, mining interests, etc., through influencing prices of commodities, and home-builders and veterans through lowering interest rates have proved themselves far less successful than general coun-