hence, by implication its potential output, is a function of a large variety of factors affecting the supply of productive resources—labor, capital, natural resources—as well as the efficiency with which those resources can be used in production. Actual output is a result of a wide variety of factors affecting both demand and supply. The rate of increase in output will be determined by the growth of demand, on the one hand, or the growth of supply, or potential output, on the other, according to which is the smaller, and hence the limiting factor in each period of time. If the potential growth is growing at 4 percent per year, and aggregate demand is growing at 3 percent, then, output obviously will tend to be limited to a rate of rise of 3 percent rather than rising in line with the potential supply at 4 percent per year.

The reverse situation, of course, will be true if aggregate demand is growing at, say 5 percent, while the growth of potential output is only 3 percent. In this case an inflationary excess of demand will develop and the excess of aggregate money demand over potential output will find expression in inflation—a familiar development during war periods or periods of monetary inflation.

In making an analysis of the historical record in search of a measure of potential output and growth, allowance must be made for the fact that two sets of forces have been operating—a set of demand factors and a set of supply factors that tend to make available output in line with demand. In the analysis, therefore, measures of cyclical variations in demand and other short-term influences have been introduced and by taking account of these, the output of the economy at some rate of operation, which we shall specify as the potential, was determined for each year, defining this potential in terms of a rate of use of resources. The historical data analyzed below cover the years 1909 to 1958 in detail.

Capacity and growth

The preliminary sketch presented in chapter I (p. 6) indicated one possible approach to analyzing and measuring the potential output of the American economy and its rate of growth. If, in addition to the series on GNP in constant prices, a measure of capacity was available, it would be possible to calculate the ratio between actual output and capacity for each year, or month, or quarter, over a series of years. Then the performance of the economy in each of these time periods could be studied and compared with the ratio of output to capacity. From this process, it would be possible to arrive at an average ratio of output to capacity corresponding to criteria for desirable performance, including perhaps ratio of employment to the available labor supply, use of capital to availability of capital, stability of prices, and rate of growth of capacity. This average ratio applied to the measure of capacity each year would give a time series representing the desired potential output of the economy.

This would be a suitable process if a reasonably unambiguous measure of the capacity of the economy was available. As noted above, no such measure for the capacity of the economy as a whole is available and, indeed, there is much dispute over whether or not one can be produced, or even designed in theory (23). The problem of computing the measure of potential economic growth arises in part because the development of a concept and measure of the capacity of the economy has proved impossible up to the present.