Chapter II. The Determinants of Potential Economic Growth

The calculated growth potentials of the American economy presented in chapters III and IV rest upon an analysis of the historical record of the performance of the economy and of the major output-determining factors. Fortunately today the analysis of the factors which determine the output of the economy at any particular time and which determine the rate at which the economy's capabilities for producing goods and services increases over time, can draw upon a much larger and richer body of theoretical and empirical research than formerly.

Almost two decades ago, when, during World War II, analysts in and out of Government developed models of the economic growth of the economy as a basis for making projections of a postwar full employment economy, the data available and the analytical tools were more primitive than at present. These models, or projections were used to study the problems of reconversion and unemployment which would arise when World War II came to an end, and a return to more peaceful conditions was possible. In the intervening years, both economic theory and empirical research have turned increasingly to the study of economic growth and progress under various pressures of practical problems, on the one hand, and of increased theoretical interest on the other. This increased interest in, and devotion of intellectual and research resources to, the study of economic growth is all to the good.

Professor Domar has stated the past position of growth in economic theory quite aptly:

> In economic theory, growth has occupied an odd place: always seen around but seldom invited in. It has been either taken for granted or treated as an afterthought (17).

The turn of economic research toward mathematical and empirical studies, finding its ultimate expression in rationally designed econometric studies and input and output tables, has produced a whole new body of analytical tools for tackling the problems of analyzing and measuring the potential growth of the economy. The pioneering work is found in the studies of the production function and its empirical measurement, by Prof. Paul H. Douglas and his colleagues, first at Amherst and later at the University of Chicago, which found expression in the Cobb-Douglas production function (18).

This work has been carried forward in a number of studies including those by Tintner, Hildreth, Nichols, Verhaulst, Heady, Solow, and Leontief (19). Closely related developments have occurred in linear programing (20) and the development of input-output models associated principally with the work of Leontief (21). The critical literature on the statistical derivation of production functions is extensive, especially on the economic interpretation of the results (22).

Supply, demand, growth, and output

The previous chapter stated that the growth in the economy's capabilities for producing goods and services, that is, its capacity, and,