

10 POTENTIAL ECONOMIC GROWTH IN THE UNITED STATES

skills and know-how, on the accumulated stock of capital, on the availability of natural resources, and upon the current technology and the rate at which new techniques are introduced.

These factors are familiar. Output and growth also are influenced by the rate and character of scientific research; the proportion of output which is plowed back into intangible capital assets; the extent to which the current capital stock embodies the most up-to-date technology or still reflects that of some past period; rising levels of educational attainment and health; the ratio of the labor force to population; changes in the average number of hours worked per year per person employed; changes in the average degree of managerial skill; the degree of stimulation of advancement of efficiency from competition at home and abroad; and a wide variety of influences arising out of the social and political environment in which the economy operates. Some of these factors cannot be measured directly at the present time, some of them are not measured though perhaps they could be, and some may not be measurable at all.

Economists, however, cannot put off attempts at the solution of practical problems until final, perfect solutions to the problems of concept and measurement can be found. Progress comes from the continual interplay of theory, measurement, and empirical analysis so that theorists develop better analytical tools out of the challenge of practical research attempts, while measurement and empirical analysis progress by using to the utmost whatever tools are available to do the best job possible at the moment, recognizing always that eventually some better solution will be possible when improved tools and improved measurements are developed out of experience.

In this spirit, the present study is an attempt at development of a simple model or description of the economic process of production, using available measurements of the various inputs and outputs, and at development of a way of determining from these data the quantitative relationships between the various inputs and outputs.

In chapter II, the technical argument is outlined, including the measures of the various factors and the aggregate function, expressing the relation between inputs of productive factors and outputs of goods and services. Further, the structure of the model of the growth of the economy will be related to preceding work.

In chapter III, the actual fit of the model to the historical data is given, showing the way in which the actual relationships were developed by processing various measures of inputs and outputs. Some of the implications of this analysis for interpreting past economic growth are developed.

In chapter IV, the measures of potential economic growth developed in chapter III are utilized to develop a picture of the possibilities for future potential economic growth of the United States to the year 1975, with some discussion of their implications for public policy.

Notes referring to sources or expanding on particular technical points in the analysis are given in part II of this paper, entitled "Technical Materials." Numbered references throughout part I are to these numbered "Technical Materials."