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INTRODUCTION

The economic problem is commonly defined as the efficient allocation of productive resources among competing ends. For the economy as a whole, the economic problem is to satisfy our wants as fully as possible with the limited amounts of resources (including knowledge) at our disposal. The success with which the problem is solved by our economic system must be appraised, relative to the past, to other countries, or even to our hopes, by the amount and growth of output, by the economy's ability to produce a given output with decreasing amounts of our scarce resources, and by its ability to employ all our available resources.

Nor are we concerned only with aggregates of outputs and inputs. There is a subsidiary economic problem for every type of output, whether we classify it broadly as manufactures or more narrowly as wheat bread. Is efficiency growing fast or slowly in filling what are usually viewed as basic needs—food, clothing, and shelter? Are we employing more or less of our resources in providing through investment for a larger future output, in supplying personal services, in maintaining governmental activities?

Comprehensive and continuous information on the size and composition of the outputs of goods and the inputs of resources is necessary to answer these and many other significant questions. Our present information cannot be said to be entirely satisfactory. Data on output and labor input are relatively adequate only for the period since about 1900, and then for merely a portion of the economy. In other sectors, such as personal services and government, aside from limitations of data there are serious conceptual problems in measuring output—to be discussed later. Yet the studies of output, employment, and output per worker so far completed at the National Bureau provide the most comprehensive informa-

tion yet assembled on trends during a fairly long period, and they are our main source in this essay.*

The findings illuminate a multitude of inquiries, but we confine discussion to a summary of how they bear on three important questions:

- 1 How has the magnitude and composition of output—the end product of economic activity—varied over time?
- 2 How has labor—the most important of our scarce resources—changed in amount, composition, and distribution?
- 3 What changes have taken place over time in the efficiency with which labor is utilized?

A synopsis of the broad answers to these questions will first be given. Against this general background, I shall then discuss more detailed findings of the studies.

*The volumes already published are:

The Output of Manufacturing Industries, 1899-1937 (1940) and *Employment in Manufacturing, 1899-1939* (1942), both by Solomon Fabricant; *American Agriculture, 1899-1939* (1942), by Harold Barger and H. H. Landsberg; *The Mining Industries, 1899-1939* (1944), by Harold Barger and S. H. Schurr; *Output and Productivity in the Electric and Gas Utilities, 1899-1942* (1946), by J. M. Gould.

In addition the following *Occasional Papers* have been published: *Manufacturing Output, 1929-1937* (1940), *The Relation between Factory Employment and Output since 1899* (1941), *Productivity of Labor in Peace and War* (1942), and *Labor Savings in American Industry, 1899-1939* (1945) by Solomon Fabricant; *Domestic Servants in the United States, 1900-1940* (1946), by George J. Stigler.

An unpublished study of railroad transportation by Harold Barger was also used.