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77

SIGNALS OF RECESSION AND RECOVERY

AN EXPERIMENT WITH MONTHLY REPORTING

JULIUS SHISKIN

NATIONAL BUREAU OF



ECONOMIC RESEARCH

1961

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*(Resolution adopted October 25, 1926, as revised February 6, 1933,
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The views expressed in this paper are the author's and not necessarily those of the Bureau of the Census or any other government agency.

J. S.

Foreword

The fruits of basic research, of which the economic reporting system described in this paper is one, are seldom predictable. Most of the methods and findings used here had their origins in research done at least as long ago as the First World War. The results were not foreseen by those, such as Wesley Mitchell and Warren Persons, who were then investigating business cycles and analyzing economic time series. Who could have known that many of the features of business cycles or of time series then being studied would survive a great depression and another world war? And who would have believed that laborious calculations which took months on a manual calculator would be done in minutes on an electronic computer?

Yet many of the fundamental features of business cycles have survived economic and military upheavals as well as powerful new government policies. The monthly reports that Julius Shiskin began to prepare for President Eisenhower's Council of Economic Advisers in the autumn of 1957 took advantage of this fact. The content and arrangement of these reports resulted directly from the basic research that had been started many years before.

Attempts at practical application of research findings, in economics at least, also have a scientific value. They provide a testing ground, and may either yield further support for or cast doubt upon previous findings. It is a far better ground than the one available to the original investigator since it lies in the future and cannot be bent to fit his preconceptions. Hence, the results described in this paper represent a contribution to basic research as well as a product of it.

The interest of the National Bureau of Economic Research in the development of what Shiskin calls "an early-warning system of economic intelligence" is twofold. First, like all institutions engaged in basic research, it wants to see its findings put to use. Second, it welcomes the further accumulation of evidence for or against its findings. The findings that are supported can then be regarded with more confidence; the others can be surrounded with question marks, or modified, or discarded.

Furthermore, Shiskin has made some new historical and statistical contributions. His distribution by months of the dates when certain

economic indicators reach their highest values to date is of particular interest as a way of recognizing an approaching or a recently passed downturn in general business. The method is equally applicable to the problem of recognizing an upturn. Another contribution is his standardization of series that normally experience different rates of rise or fall, which makes it easier to detect abnormal changes. Still another is his method of smoothing time series so that different degrees of irregularity are erased and cyclical swings are equally visible in all.

But the principal contribution of this paper is the demonstration that basic findings on cyclical behavior can, with the aid of a large-scale electronic data-processing system, be used to provide a comprehensive yet promptly available picture of current business cycle developments. The business forecaster, who may often feel that his greatest difficulty lies merely in keeping up to date, is here shown how that job can be done. He will discover a tested system for doing it, improved month by month over a period of more than three years, found highly useful by those who have made exacting demands upon it, yet still profoundly experimental. After some experience with it, he will perceive that it definitely reduces the area of uncertainty that surrounds current business analysis and forecasting.

Although, as I have indicated, this paper is the outcome of a long line of research, conducted not only at the National Bureau but also in universities and government agencies, a word should be said about its immediate ancestry. Its preparation was undertaken as one of several National Bureau studies of the use of electronic computers in business cycle research. This group of studies is being financed by a grant from the National Science Foundation, by a contribution of computing facilities by the International Business Machines Corporation, and by other funds of the National Bureau. Although Shiskin carried out some of the research and wrote most of the paper while on leave from the Bureau of the Census, the results he describes were largely obtained in the course of his work there. The vision, initiative, and cooperation of many individuals have therefore been indispensable to the economic experiment reported here.

GEOFFREY H. MOORE