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*The Catholic University of America and  
National Bureau of Economic Research*

*Dating postwar  
business cycles:*

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TO WESTERN GERMANY, 1950-67

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## Foreword

Nearly twenty years ago Arthur Burns described an “unseen” cycle underlying the swings in aggregate economic activity. As he put it:

A continual transformation of the economic system occurs beneath the surface phenomena of aggregate expansion and contraction . . . There are two cycles in economic activity, not one. First, there is the cycle of sustained expansions and contractions in the aggregate itself. Second, there is the cycle in the distributions of expansions and contractions within the aggregate. The first cycle is “seen” since we are accustomed to following comprehensive records of business conditions. The second cycle is “unseen” since few of us subject the components of comprehensive aggregates to close examination.<sup>1</sup>

Ilse Mintz has now demonstrated the existence of a similar type of “unseen” cycle in an economy where the usual type of “seen” cycle has not been highly visible. After World War II and until 1966, aggregate economic activity in West Germany grew almost uninterruptedly. The “cycle of sustained expansions and contractions in the aggregate” was not apparent in comprehensive measures of activity such as the gross national product or total employment. This ordinarily visible sign of the business cycle had dropped from sight. But the “cycle in the distributions of expansions and contractions within the aggregate” had, as Mrs. Mintz shows, not been eliminated.

Two statistical techniques, applied quite independently to various significant measures of economic activity, reveal sustained periods when economic activity in Germany grew at an abnormally high rate, alternating with sustained periods when activity grew at an abnormally low rate. Relative to the long-term growth, general expansions and contractions similar to those experienced before World War II in Germany and in other countries continued to occur. Armed with these results, Mrs. Mintz proceeds to establish a chronology setting forth the beginning and ending dates of these “expansions” and “contractions,” which she calls “speedups” and “slow-downs.”

Her work puts into operational form a concept of the business cycle that is both old and new. The idea that a business cycle can be measured as a short-term deviation from a long-term trend was developed in the work of

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<sup>1</sup>*New Facts on Business Cycles*, 30th Annual Report of the NBER, May 1950, pp. 10-11 (reprinted in *The Business Cycle in a Changing World*, New York, NBER, 1969.)

## Foreword

Henry L. Moore, Warren M. Persons, Frederick R. Macaulay, Edwin Frickey and others during 1910-30.<sup>2</sup> Then for several decades this view of the business cycle was almost ignored. The Great Depression and the boom accompanying World War II made secular trend measurement both difficult and hardly necessary for the purpose of discerning cycles. Econometric model builders generally shunned the idea of separating trend and cycle.

Recently, however, there has been a resurgence of interest, especially in analyzing the gap between actual and potential output. The potential output is that calculated to result under conditions of full employment, and hence it is governed by the long-run trends in the labor force, the average workweek and productivity. The deviation of actual output from this full employment trend level is the "gap." This analysis differs from some of the earlier work in its fuller development of the theoretical basis for the level of potential output and its rate of change, although the results still depend importantly upon extrapolative procedures.<sup>3</sup> Various measures of capacity utilization are similar in concept, and all of them bear a resemblance to the "deviation from trend" idea.

Mrs. Mintz uses deviations from trend explicitly as one method of identifying cycles. The alternative method, following the work of Friedman and Schwartz, identifies alternating periods of "high" and "low" rates of growth, without reference to an explicit trend. Applied to individual series, the two methods do not always yield the same set of cycles or identical dates. But the similarities predominate, and the upshot is strikingly consistent evidence of a widely diffused cyclical movement in the German economy. On this basis Mrs. Mintz is able to firmly establish a chronology of business cycles in West Germany from 1951 to 1967.

The American reader of this study is likely to ask: What implications do these results have for the United States? More than eight years have passed

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<sup>2</sup>For an account of this development up the mid-twenties, see Wesley C. Mitchell, *Business Cycles: The Problem and Its Setting*, New York, NBER, 1927, pp. 190-233. This work also contains many examples of indexes of business activity adjusted for secular trend (including one for Germany, 1898-1914) and develops a chronology of U.S. business cycles based upon five such indexes (see p. 335). The effect of trend adjustment upon cyclical measures is explored more thoroughly in *Measuring Business Cycles* by Arthur F. Burns and Wesley C. Mitchell, New York, NBER, 1946.

<sup>3</sup>In this connection it is interesting to recall Wesley Mitchell's view on secular trends in his 1927 volume on business cycles:

We stand to learn more about economic oscillations at large and about business cycles in particular, if we approach the problem of trends as theorists, than if we confine ourselves to strictly empirical work. The trends which promise the most important additions to our knowledge are those which correspond to rational hypotheses, although they may not "fit the data" so well as empirical constructions which are difficult to interpret. For it may prove possible to integrate the rational hypotheses which yield instructive trends with the theory of business cycles (p. 230).

since the last business cycle turning point, in February 1961. Have business cycles of the type formerly identified disappeared? Would Mrs. Mintz' procedures, applied to U.S. data, bring them to light? Should we henceforth use her methods to develop a business cycle chronology for the United States?

The application of these methods to data for the United States as well as for other countries is, indeed, a part of the present investigation. Pending its completion, we can only speculate upon the nature of the results. In the first place, the peak dates would likely be earlier than the present business cycle peaks, and the trough dates may be later. Such shifts are not inevitable, since they depend on how sharply defined the movements in activity are in the neighborhood of the present dates, and they may affect peaks more than troughs or vice versa. But the upshot is likely to be a more nearly equal division of the cycle into expansion and contraction phases than is presently the case: expansions or speedups would be shorter and contractions or slowdowns longer.

Furthermore, some contraction phases may be recognized where none are now, and those that were marginal in terms of the present concept would become clearer. The slower rates of growth in early 1967, in late 1962 and early 1963, in 1956 and in 1951-52, for example, would become candidates for admission to the list of business cycle contractions.

These speculations about the nature of the results raise some questions of their own. Would the list of cycles, and their dates, become as generally accepted as the present chronology? Would they be more dependent upon the particular statistical technique used to identify them? More dependent upon the judgment of the investigator? Would there be greater uncertainty and hence a longer lag in identifying downturns or upturns promptly than is presently the case? Should the present chronology be continued in addition to the new one? If so, would the existence of two chronologies be a source of confusion, since at times they may appear inconsistent?

The basic question, of course, is whether a new chronology of business cycles will be an aid to analysis. There can be little doubt that it will. Since Thorp's pioneering work for the National Bureau, which first established business cycle chronologies for many countries,<sup>4</sup> the analytical value of such chronologies has become generally recognized. Not only is the U.S. chronology widely used in government and private publications and reports, but similar work has recently been undertaken for other countries (e.g., Canada, Japan, Italy, Great Britain and Australia). Such chronologies provide benchmarks, facilitating all sorts of comparisons. With the computer programs that are now available, both to aid in establishing the chronologies

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<sup>4</sup>Willard L. Thorp, *Business Annals*, NBER, 1926.

## *Foreword*

and in analyzing data in terms of them, an ever-widening use lies ahead. We shall have reason, therefore, to be grateful to Mrs. Mintz for providing a new tool for exploring the causes and consequences of business cycles, and for examining the achievements of economic policy in dealing with them.

*Geoffrey H. Moore*