

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Business Cycles, Inflation, and Forecasting, 2nd edition

Volume Author/Editor: Geoffrey H. Moore

Volume Publisher: Ballinger

Volume ISBN: 0-884-10285-8

Volume URL: <http://www.nber.org/books/moor83-1>

Publication Date: 1983

Chapter Title: Growth Cycles: A New-Old Concept

Chapter Author: Geoffrey H. Moore

Chapter URL: <http://www.nber.org/chapters/c0691>

Chapter pages in book: (p. 61 - 64)

## Chapter 5

# Growth Cycles: A New-Old Concept

In terms of the "growth cycle," the longest expansion in economic activity since World War II ran from March 1975 to December 1978, a period of forty-five months. The next longest expansion, 1954-1957, lasted only thirty months. The average for the eight expansions between 1949 and 1973 was twenty months, about the same length as the average contraction.

The growth cycle is a relatively new concept of the business cycle. It is also a very old idea. The growth cycle is a fluctuation around the long-run trend—a trend-adjusted business cycle, if you like. In these days of great public sensitivity to economic slowdowns, the growth cycle is a concept whose time has come. Perhaps one should say that it is ready to be born again. The concept is useful in analyzing the experience of countries with very rapid growth rates, like West Germany and Japan before the 1970s, as well as those with slower growth rates, like the United States and the United Kingdom. The rapidly growing countries were not immune to fluctuations in their growth rates that were very similar to those experienced by the slower growing countries.

The growth cycle concept is also useful because of two major differences between it and the ordinary business cycle. Growth cycle downturns occur sooner than business cycle downturns, so one can identify them earlier. They also occur more frequently. Between 1948 and 1973 there were six business cycle downturns but nine growth cycle downturns. December 1978, if that date proves to be correct, marked the tenth downturn. Because of their greater fre-

Reprinted from *The Morgan Guaranty Survey*, August 1979.

quency there are more cases to generalize from, and one can distinguish between the six slowdowns that became recessions and the three that did not (see Appendix Table A-4).

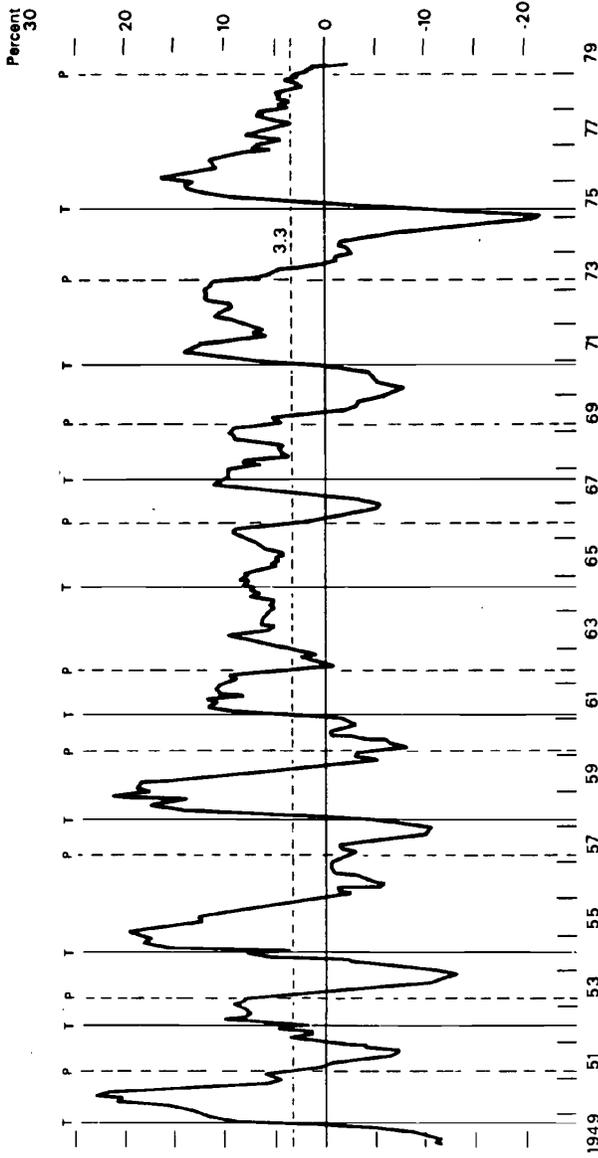
A company's or an industry's statistics can be analyzed in relation to these slowdowns—for example, their duration or severity. Take gasoline consumption. A slowdown or recession in the economy might mean fewer trucks and commuters on the road, a falloff in vacation travel, and more interest in car pooling or other ways of reducing unnecessary trips. Sales of new cars and the accompanying increase in mileage traveled might be smaller, and some customers would shift to the less expensive models with greater fuel economy. The figures on gasoline, indeed, show effects of this sort. The increase in gas consumed on highways has been smaller during the nine economic slowdowns since 1948 than during the adjacent expansions. The average rate during the expansions was 6 percent per year, compared with 4 percent during the slowdowns. During the slowdowns that became recessions, the growth rate in gas consumption was only 3 percent.

Studies at the National Bureau of Economic Research, which are being continued and expanded at the Center for International Business Cycle Research at Rutgers University, have established some significant findings about growth cycles. Here are three samples:

1. Leading indicators have a better record of forecasting growth cycles than of forecasting business cycles. The reason is that these indicators—which include such factors as housing starts, profit margins, stock prices, and orders for goods—are sensitive to slowdowns of any kind, whether of the recessionary variety or not. To paraphrase Paul Samuelson's memorable statement about the stock market, when the leading indicators were forecasting nine out of the past six recessions, they also were forecasting nine out of the past nine slowdowns.

Figure 5-1 demonstrates this proposition. Every one of the nine growth cycles is reflected in a swing in the growth rate of the leading index. The three slowdowns that did not turn into recessions (1951-1952, 1962-1964, 1966-1967) were marked by smaller dips in the leading index than those that did. Every time the growth rate of the leading index (measured over the preceding six months, as explained in the figure) fell below its long-term rate (3.3 percent per year), a peak in the growth cycle was at hand. This happened for several months in the summer of 1978 for the first time in this expansion and again beginning in November. Hence, the slowdown in the economy that became evident in the spring of 1979 was registered in the leading index several months beforehand.

Figure 5-1. Rate of Change in U.S. Leading Index During Preceding Six Months.



Note: Vertical lines mark the peaks (P) and troughs (T) in the growth cycle (National Bureau of Economic Research). The December 1978 peak is tentative. The rate of change in the leading index (U.S. Department of Commerce) is equal to the current month's index divided by the average of the twelve preceding months, expressed at an annual rate. The horizontal broken line is the long-term growth rate in the index, 3.3 percent, 1948-1978.

2. Leading, coincident, and lagging indicators behave in much the same way in relation to growth cycles in other industrial countries as they do in the United States. This means that the same indicators that display leading properties in the United States also display them abroad. Interestingly, too, the ratio of coincident to lagging indicators, which is basically a measure of imbalance in the economy, is a leading indicator of growth cycles in all the countries for which it is available.

3. Growth cycles are closely related to the rate of inflation. Indeed, every major decline in the inflation rate since 1948 has been associated with a growth slowdown. That is, no improvement in inflation has been achieved without a slowdown—often accompanied, unfortunately, by some rise in unemployment. That is true in the United States, Canada, the United Kingdom, West Germany, France, Italy, and Japan (see Chapters 6 and 14). Such a tie between economic activity and price pressures has been with us for a long time. Recently I discovered that the close connection had been documented in an analysis, published in 1926, of business cycles in relation to trends in wholesale prices that covered U.S. history from 1790 to 1925 (see Chapter 15). Our Founding Fathers faced much the same problem that we do.