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## *Chapter 11*

# **Five Little-known Facts about Inflation**

### **FACT ONE: INFLATION IS CLOSELY TIED TO THE BUSINESS CYCLE**

Every downturn in the business cycle since 1948 has been associated with a downturn in the rate of inflation, and every upturn in the business cycle has been accompanied by an upturn in the rate of inflation, measured by the consumer price index (CPI). On only two occasions has a decline in the inflation rate occurred during an expansion in business, but in both instances there was a marked slowdown in the rate of economic growth. On the record, a slowdown or recession has been both a necessary and a sufficient condition to reduce the inflation rate. A business recovery and expansion has been both necessary and sufficient to raise the inflation rate.

The latest business cycle upturn came in March 1975 and the upturn in the inflation rate followed about a year later. Its low point was 4.7 percent, centered on April 1976. The latest rate, centered on February 1977 (covering the six months November 1976-May 1977), was 8.7 percent. Both rates are adjusted for seasonal variations; a six month interval is used in order to smooth out irregular fluctuations.

Reprinted from *The Morgan Guaranty Survey*, August 1977.

## **FACT TWO: FOOD PRICE INFLATION IS CLOSELY TIED TO THE BUSINESS CYCLE**

All the major swings in the overall inflation rate (CPI) have been accompanied by similar swings in the rate of change of food prices. Although weather and crop failures have had important effects on food prices at times, most of the major swings in food price inflation have been closely tied to the business cycle. One of the reasons is that food prices respond quickly and sharply to the changes in demand associated with the business cycle. In recession, employment and incomes decline, and this holds food prices down. In prosperity, rising employment and incomes pull food prices up. Another reason is that foods, especially processed foods, contain a significant labor cost component, and this is likely to move up and down with the business cycle, regardless of food supply conditions. The food inflation rate reached its low point (virtually zero) in January 1976, ten months after the business recovery began and has been rising since. The latest rate, calculated in the same way as for the overall rate, was 12.1 percent (seasonally adjusted annual rate, November 1976-May 1977).

## **FACT THREE: THE WHOLESALE PRICE INDEX IS NOT A GOOD FORECASTER OF CONSUMER PRICES**

Only a small part (about 30 percent) of the wholesale price index (WPI) is directly related to the prices paid by consumers. That is the part labeled "consumer finished goods." The rest—raw materials, machinery, and the like—is not bought by consumers. Moreover, the WPI for consumer finished goods, which includes things like foods and shoes, applies to only a part of what consumers buy—namely, commodities. Services such as housing (rent, mortgage interest) and medical care are not covered by the WPI at all, but are included in the CPI.

When the two comparable parts of the WPI and the CPI are compared (WPI consumer finished goods and CPI commodities) for the period covered by both (1956 to date), it turns out that the rate of change in the former typically leads the latter by a month. This happened at five of the ten upturns or downturns in the two rates since 1956. At two of the other five turns the two rates were very close together; at the rest they were rather far apart. Hence the WPI consumer finished goods component provides a good check on what the

commodity price component of the CPI is doing or is about to do, but not much of a forecast.

As for the rest of the WPI, the most useful "leading indicator" vis-à-vis the consumer price index is the WPI for crude materials excluding foods, feeds, and fibers. This covers the materials and fuels that enter into the cost of production of many consumer products and is highly sensitive to shifts in demand and supply that later affect consumer prices. The rate of change in this index has led the rate of change in the CPI at fifteen of the sixteen turns in the latter since 1948, with an average lead of seven months. The latest upturn in crude materials preceded the upturn in the CPI rate by more than a year.

#### **FACT FOUR: THE EMPLOYMENT RATIO IS A BETTER INDICATOR OF INFLATIONARY PRESSURES THAN IS THE UNEMPLOYMENT RATE**

A high level of unemployment has not prevented the rate of inflation from increasing. For example, the current upswing in inflation began in the spring of 1976, when the unemployment rate was around 7.5 percent. During the next twelve months the inflation rate climbed sharply even though unemployment remained high, contrary to some predictions that the slack in the economy would hold down prices. This is not an isolated instance attributable to special circumstances. Arthur F. Burns, writing in 1951 about the results of business cycle studies at the National Bureau of Economic Research prior to World War II, summed it up in seven words: "Inflation does not wait for full employment." After twenty-five years of more recent experience he said the same thing (less succinctly) in testimony before the Senate budget committee, March 22, 1977: "The prices of final goods and services gather substantial upward momentum well before full utilization of resources is achieved."

Although the rate of inflation has not been closely correlated with the unemployment rate, it has been more closely correlated with another measure of labor market tightness—the employment ratio. This is simply the percentage of the population of working age that have jobs. Naturally it moves in the opposite direction to unemployment, but the significant difference is that it takes into account shifts in labor force participation as well. Sometimes, as in recent years, a high level of unemployment is accompanied by a high level of employment, which means that more persons are in the labor force and fewer outside of it. The result is that labor markets are tighter than

the unemployment rate, taken by itself, suggests. For example, in late 1973 and early 1974 the employment ratio reached an all-time high, even though the unemployment rate, at 5 percent, was not especially low. The high demand for labor pushed up wage costs, and the higher earnings pushed up demand for goods; both factors pushed up the rate of inflation. Similar forces are at work during the present recovery. The employment ratio is at a higher level than at any time prior to 1973, and the inflation rate is at the level reached early in 1973.

**FACT FIVE: FORECASTS OF THE  
INFLATION RATE HAVE BEEN  
A LAGGING INDICATOR OF THE  
ACTUAL RATE**

Economists have been aware for many years that the rate of inflation tends to perpetuate itself. Once inflation gets going, it tends to keep going. Hence one can do pretty well by forecasting that next year's inflation rate will be the same as last year's. The forecaster simply takes advantage of the inertia in the price system. The trouble is that forecasts made on this plan inevitably lag behind events. When the actual rate of inflation accelerates, the upturn will be missed. When it decelerates, the downturn will be missed. That is, the turn will not be identified before or at the time it happens, but only after it happens.

A record of economists' forecasts of the rate of change in the consumer price index, compiled since 1947 by Joseph Livingston of the *Philadelphia Inquirer*, demonstrates this tendency. Only twelve of the sixteen turns in the inflation rate between 1947 and 1976 were recognized by the forecasters at all, and at ten of the twelve the forecasts lagged. The average lag was six months. At the latest upturn the forecasts were ten months late. Perhaps more attention to the relationships discussed above will help to improve the record.