

and, therefore, the effects of changes in the stock of money are, to a significant extent, predictable and, finally, (3) the quantity of money can be controlled accurately within narrow limits by monetary policy.

On a less sophisticated level than the Friedman-Meiselman study, analysis of the attached chart, relating monetary change to U.S. business cycles since 1918, suggests the following conclusions:

1. All economic declines were preceded by monetary restriction, that is, reduced growth in the money supply, thereby supporting the argument that monetary restriction leads to less spending.

2. All recoveries were preceded by monetary ease, that is, increased monetary growth, thereby supporting the argument that monetary expansion leads to higher spending.

3. The time lead of monetary contraction prior to declining economic activity is relatively long, averaging about 18 months, but is somewhat variable.

4. The time lead of monetary expansion prior to rising economic activity is relatively short, averaging about 9 months, but also somewhat variable.

5. Although the relation is not perfect, there is a noticeable correlation between the severity of monetary change and the subsequent change in economic activity. For example, the largest monetary contractions coincide with the largest economic declines, 1921, 1929, and 1937; and the largest monetary expansions accompanied the unusually sharp rate of recovery following each of those declines.

It is worth noting that the consistent relation between monetary change and spending change is not unique to the United States. I know of no foreign country that suffered significant inflation that did not experience a large growth in the quantity of money. Nor do I know of a country suffering serious deflation that did not have monetary contraction. Monetary change and, hence, monetary policy, can be a source for great good or great evil. It cannot solve all our economic problems such as encouraging greater investment and hence higher economic growth, or greater price flexibility, but it can and does exert important effects upon total spending.

III. SOME POLICY IMPLICATIONS

Some of the policy implications that appear to follow from these empirical relations are:

1. Monetary change and hence monetary policy is an extremely potent economic tool capable of either increasing or decreasing total spending. Excessive monetary growth when the economy is fully employed can lead to increased spending and inflation. Too little money and liquidity is capable of reducing spending and initiating an economic decline.

2. The use of monetary ease for inducing expansion in total spending is not analogous to "pushing on a string" but is more nearly analogous to "pushing a ramrod." In fact, monetary policy appears to work with a shorter lag in inducing rising spending than in causing reduced spending.

3. Large variability in monetary expansion should be carefully avoided since business fluctuations appear to be more closely associated with the change in monetary growth than with the level of monetary growth. On the whole, monetary policies pursued since the "accord"