

Research Department  
Federal Reserve  
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## Money, Prices, and Interest Rates

Monetary policy is currently at a critical juncture, since it must deal simultaneously with the twin problems of continuing high inflation and a developing recession. Some observers suggest that the Federal Reserve has given up the battle against inflation, because it has allowed a sharp drop in interest rates without first finding substantial evidence of any moderation in price behavior. Others worry that the Fed is contributing to a more severe recession, because the growth of the monetary aggregates has lagged below the lower bounds of their annual target ranges. Putting these concerns into proper perspective requires a realistic assessment of 1) the tightness of current monetary policy, 2) the lags between money, output, and prices, and 3) the relationship between money and interest rates.

The Federal Reserve has taken a strong anti-inflation stance by attempting to reduce money-supply growth—specifically, by choosing a 5 1/4-percent midpoint for the target rate of growth of M-1B, and associated targets for the other monetary aggregates. (M-1B equals currency plus bank demand deposits plus other check-like deposits at banks and other financial institutions.) These targets represent a marked deceleration from the money-growth rates experienced previously, such as M-1B's 8-percent annual growth rate over the 1977-79 period. Thus, according to this monetarist approach, the underlying inflation rate eventually should respond to the slowdown in money growth—although this development may be masked at times by sudden price movements, such as occurred in the consumer-price acceleration of first-quarter 1980.

### Lags and the long view

Past experience would suggest that a 5 1/4-percent rate of growth of M-1B will, in the long run, tend to produce about a 7 1/4-percent rate of growth of nominal GNP. That 7 1/4-percent nominal growth in turn

could be divided into a 3-percent real growth rate (the long-term trend) and an inflation rate of around 4 1/4 percent. But past experience again would suggest that this effect of monetary deceleration will be felt only after a substantial lag, lasting four to five years for the final effects to occur. Thus, if current money-growth targets were to be hit consistently—and were to remain unchanged for several years' time—the inflation rate (measured by the GNP deflator) should decline from the 9 1/2-percent rate of early 1980 to perhaps 6 1/2 percent in 1982 and (finally) 4 1/4 percent in early 1984 (see chart). However, the Federal Reserve has expressed its intention to reduce money growth gradually over time, which would imply an even lower inflation rate by the mid-1980's.

While not perfect, the close association between inflation and lagged money growth vividly demonstrates the importance of taking a long view in the battle against inflation. That relationship also suggests an important related point—the substantial lag between the trough in economic activity and the low point in inflation. Following the 1970 recession, the inflation rate did not bottom out until the third quarter of 1972; and after the 1974-75 recession, the low point in inflation was not reached until the third quarter of 1976. Similarly, even if the current recession is of normal duration and ends early in 1981, the trough in inflation generated by the current rate of monetary growth may not occur until over a year later.

### Interest-rate controversy

Deceleration in inflation implies a prior deceleration in money growth—yet some analysts argue that the Federal Reserve has already given up in the fight against inflation by allowing a sharp drop in interest rates before seeing any tangible evidence of a moderation in price behavior. This point of view assumes, however, that interest rates are a good measure of current monetary policy,

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which simply is not the case. Interest rates reflect current policy only to the extent that they reflect the liquidity effects of monetary acceleration or deceleration—that is, by falling in a period of rapid money growth or rising in a period of slow money growth. But such liquidity effects often tend to be swamped in practice by changes in the demand for money and credit resulting from past policy changes and other influences. For example, in recession periods such as the present, interest rates fall because of a decline in the real demand for money and credit—and also because of a decline in expected inflation, and hence in inflation premiums that become built into interest rates.

Of these several factors operating on interest rates, expected inflation historically has generally been dominant. But in the past two recessions, real demand effects have also been significant, leading to a fall in interest rates prior to the decline in the inflation rate. As in past cycles, current declines in interest rates are entirely consistent with a future moderation in the inflation rate, despite what some observers now contend. These individuals mistakenly believe that they are seeing the liquidity effects created by a monetary acceleration, when in fact they are witnessing a fall in the real demand for money and credit flowing from a weak economy.

### Overly slow growth?

If anything, liquidity effects are currently tending to raise, rather than lower, interest rates. Recently the narrowly defined monetary aggregates have lagged below the lower bounds of their target ranges. A prolonged undershoot of current monetary targets would constitute unwarranted tightness, and could be counter-productive in achieving both inflation and real-output goals.

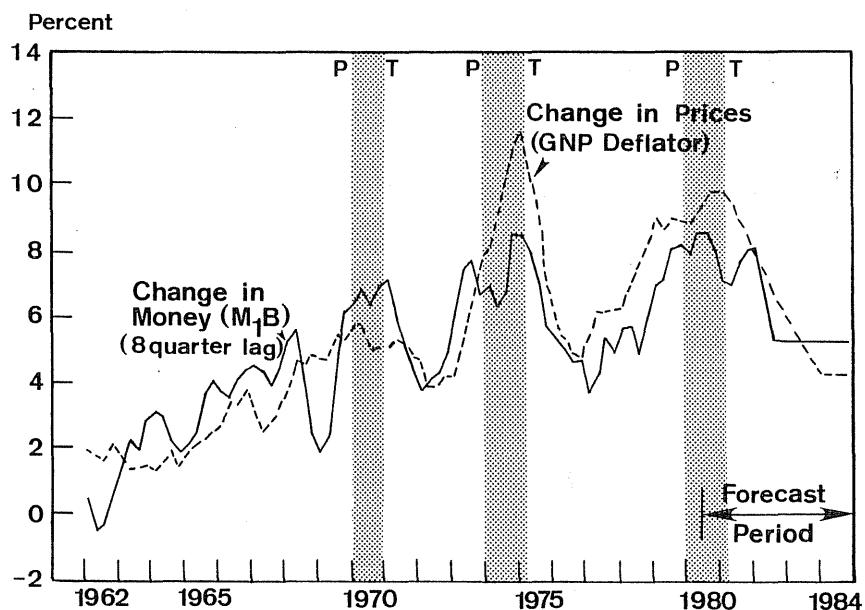
The recession could be aggravated, with higher-than-expected unemployment, if the Federal Reserve consistently failed to meet its money-growth targets. However, that situation could also set the stage for future accelerated inflation, because the Fed would

come under pressure in a severe recession to abandon its current monetary-growth targets—in effect, to abandon its anti-inflationary policy.

Policymakers thus see the wisdom of bringing the monetary aggregates back on path in coming months. That course of action, by providing the economy with sufficient liquidity, helps to moderate the severity of the recession—and also enhances the credibility of the Fed's policy stance. In contrast, excessively slow money growth would not be helpful, because in view of the lags involved, it would not bring any substantial improvement in prices until after the advent of double-digit unemployment, which presumably could lead in turn to pressures for excessively stimulatory public policies.

A procyclical pattern of money growth (i.e., one that accentuates instead of dampens the business cycle) can be avoided, provided that all sectors of the economy recognize that current interest-rate declines stem from a decline in the demand for money and credit generated by a weakening economy, rather than from the liquidity effects of a monetary acceleration. Current monetary-growth targets will contribute substantially to a moderation of inflation after a period determined by the usual lags, and a stable rate of monetary growth consistent with these targets is the best guaranty against a severe recession. A more stable pattern of business activity, in turn, will provide the best environment for making further progress against inflation in the future.

**Adrian W. Throop**



Shaded areas indicate recessions

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### BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 6/18/80	Change from 6/11/80	Change from year ago	
			Dollar	Percent
Loans (gross, adjusted) and investments*	136,176	— 142	8,081	6.3
Loans (gross, adjusted) — total#	114,693	— 76	9,281	8.8
Commercial and industrial	33,202	— 149	2,137	6.9
Real estate	46,439	— 75	8,270	21.7
Loans to individuals	23,699	— 9	1,325	5.9
Securities loans	1,014	21	— 666	— 39.6
U.S. Treasury securities*	6,323	— 50	— 1,368	— 17.8
Other securities*	15,160	— 16	168	1.1
Demand deposits — total#	42,919	— 504	218	0.5
Demand deposits — adjusted	30,508	— 732	— 61	— 0.2
Savings deposits — total	27,407	224	— 2,609	— 8.7
Time deposits — total#	63,583	— 504	13,174	26.1
Individuals, part. & corp.	54,722	— 401	13,128	31.6
(Large negotiable CD's)	22,533	— 361	5,276	30.6
<b>Weekly Averages of Daily Figures</b>	Week ended 6/18/80	Week ended 6/11/80	Comparable year-ago period	
<b>Member Bank Reserve Position</b>				
Excess Reserves (+)/Deficiency (-)	— 73	110	— 9	
Borrowings	1	1	— 16	
Net free reserves (+)/Net borrowed(—)	— 73	109	— 25	

\* Excludes trading account securities.

# Includes items not shown separately.

**Editorial comments may be addressed to the editor (William Burke) or to the author . . . . Free copies of this and other Federal Reserve publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.**