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## *The Monetary Deceleration: What Does It Mean and Why Is It Happening?*

BETWEEN October 1978 and March 1979, the money stock measured by  $M_1$  fell at a 1.7 percent annual rate, while measured by  $M_2$  it rose at a 2.4 percent annual rate (continuously compounded). These rates are sharply below those of the previous three years. In the thirty-six month period ending October 1978,  $M_1$  rose at an average annual rate of 6.9 percent, while  $M_2$  rose at a 9.4 percent rate. The deceleration of money growth since October is one of the sharpest in the postwar period. The purpose of this paper is to discuss the significance of this deceleration.

Before discussing the major issues, I want to dispose of a possible, but I believe incorrect, interpretation of the monetary deceleration—the interpretation suggests that the sharp deceleration is part of a strategy of the administration and Federal Reserve to produce an early and sharp recession in order to reduce inflation quickly. Although the policymakers clearly do want to slow the economy, a deliberate, sharp recession is inconsistent with both stated policy and fiscal policy actions, which I consider to reflect only a mildly restrictive policy stance.

### **Accuracy of Monetary Statistics**

If reported rates of money growth are taken at face value, and especially if their deceleration continues for another few months, long experience indicates that the economy will fall into a deep recession. However, many observers, both inside and outside the government, believe that monetary policy is not nearly as restrictive as the published rates of money growth

suggest. Clearly, if  $M_2$  is in fact growing at 8 percent rather than at 3 percent, our view of the extent of current monetary restriction must be revised. A variety of reasons have been offered to explain why the current monetary statistics are subject to serious measurement error.

After examining the various problems with the monetary statistics, I am not convinced that there is a good reason to distrust the basic story being told by the published numbers. And my reading of the Porter, Simpson, and Mauskopf paper in this issue has reinforced this view. With respect to  $M_1$ , one measurement problem is that raised by the introduction last November of the automatic transfer service (ATS), which permits funds to be transferred from savings accounts to demand accounts to cover a check that would otherwise bounce. The effect of this regulatory change is to make savings accounts that are subject to the automatic transfer agreement equivalent to interest-bearing demand deposits. The Federal Reserve has been monitoring the amount of funds in ATS accounts; the evidence suggests that including all these accounts in  $M_1$  would raise its rate of growth by 2 to 3 percentage points. Thus, because published  $M_1$  has been falling at a 1.7 percent annual rate,  $M_1$  corrected for ATS accounts is rising at about a 1 percent annual rate, which is still a marked deceleration from earlier rates of growth. In addition, the advent of ATS accounts does not affect the  $M_2$  numbers, and  $M_2$  has decelerated sharply.

Interpretation of the money numbers is also clouded by the rapid growth of money-market mutual funds and of security repurchase agreements at banks—arrangements whereby bank depositors can withdraw funds from deposits and place them temporarily in interest-bearing securities. However, the growth of money substitutes did not suddenly accelerate in November; to the extent that there is a measurement problem, it affects the data before as well as after November. Even if money-market funds and security repurchase agreements were added to  $M_2$  as currently defined, the resulting series would not change the observation that there has been a sharp monetary deceleration since November.

It is also important to understand that mismeasurement issues are necessarily linked with interest elasticity issues. Monetary aggregates conventionally defined have an interest elasticity of demand arising precisely from the substitution of nonmonetary for monetary assets at times when interest rates are high. If current behavior is more or less comparable to behavior in the past, then the rapid growth of money substitutes is already accounted for in the money-demand functions.

It is, of course, claimed that standard money-demand functions are now far off track. But this judgment depends on two assumptions: one is that estimates of the current level of GNP will not be revised downward substantially; the other is that the standard money-demand functions correctly represent the lag structure of money demand. The same argument was heard in 1974, and yet in retrospect it is obvious that preventing the monetary deceleration of late 1974 would have served to moderate the severity of the cyclical contraction then under way. At a minimum, policy-makers should recognize that the slow money growth in recent months may reflect a softening of the economy—either today or in the future.

Doubts about the current monetary deceleration are not all on one side. It could be argued that the deceleration is in fact much deeper than the current numbers indicate. For example, the growth of time deposits in certificate form might be regarded as making a large part of  $M_2$  less liquid than it was previously. The  $M_1+$  measure of the money stock, which consists of  $M_1$  plus savings accounts in commercial banks and thrift institutions and excludes time deposits in certificate form, has been falling rapidly—at a 4.8 percent annual rate of decline from October 1978 to March 1979. In addition, some observers place great emphasis on the real money stock; with the recent acceleration in inflation, that measure is obviously falling rapidly.

I conclude that a substantial monetary deceleration is occurring. Of course, new evidence could show that the extent of the monetary deceleration has been overestimated or underestimated; but it is always true that additional data may change the picture. Because of the uncertainties, I would be only surprised rather than shocked if subsequent investigation demonstrated the need for large revisions.

The policy implication of the increasing doubt about the reliability of the monetary statistics—provided the numbers are not regarded as totally worthless—is that less weight should be placed on monetary aggregates and more on other variables such as interest rates. Once the monetary deceleration had lasted long enough that it could not be dismissed as a temporary aberration—in early January, say—policy should have shifted both to a lower money growth target and to lower interest rates. In fact, the Federal Reserve has maintained its target for the federal funds rate and permitted all the uncertainty to appear in slow money growth. This policy is optimal only under the extreme assumption that the monetary aggregates mean nothing, a position taken by just a few economists.

### **Probable Effects of the Monetary Deceleration**

My reading of incoming economic data is that they are fully consistent with the known lags in monetary processes. The sharp deceleration of money growth beginning in November should be expected to produce a downturn in the economy after a lag of six to twelve months. Thus a business cycle peak should occur between May and November of 1979. Such an outcome is fully consistent with what is already known about the economy. For example, the rate of growth of industrial production slowed from December 1978 to March 1979; according to the preliminary estimates, real GNP in the first quarter of 1979 rose at an annual rate of only 0.7 percent; housing starts declined; and new orders for durable goods, with the exception of aircraft orders, were weak. Employment was strong through March, but it typically lags behind other business cycle indicators by a few months. The one important piece of information that does not actually fit the recession scenario is the performance of the stock market thus far in 1979; the stock market almost always turns down at or before the business cycle peak and has not done so yet.

In short, I believe that the sharp monetary deceleration will produce a recession and that, when the experience is viewed in retrospect, the standard recession pattern will emerge in which monetary deceleration is linked to declining output and rising unemployment. I believe the fairly typical inflation pattern will also emerge in which the inflation rate remains practically unchanged through most of the recession, but begins to decline toward the end of it or in the early part of the next recovery.

The interesting question is not about this economic forecast, which in basic outline is widely shared by private forecasters although not necessarily for the same reasons; rather, it is why the Federal Reserve and the administration are so willing to permit extremely low money growth in the face of the available evidence.

### **Why the Monetary Deceleration Has Occurred**

The best shorthand description of day-by-day Federal Reserve policy is that it consists of an adjustable peg on the interest rate on federal funds. The extent of this pegging of the federal funds rate is indicated by the

enormous scale of open market operations required to hold the rate in a narrow band. In 1978 the net change in the monetary authority's open market account was \$7.0 billion, but over the course of the year gross purchases of securities amounted to about \$728 billion and gross sales to about \$721 billion. With the federal funds rate tightly controlled in the short run, quantities of bank reserves and money are determined by private demands.

To understand the significance of this mode of operation, consider two different ways in which the Federal Reserve might operate in pursuing its underlying objectives. On the one hand, it could control bank reserves, permitting interest rates to fluctuate relatively freely in the short run, but temper the reserve targets to realize a trade-off between interest rate targets and money stock targets over a period of several months. On the other hand, the Federal Reserve could control interest rates on a day-by-day basis—as it has for many years—but permit some interest rate fluctuations to produce a desired trade-off between interest rates and money stock paths over a span of several months. In principle, on the basis of monthly, or certainly quarterly, averages, the two different day-by-day control strategies could lead to essentially identical paths for interest rates and the money stock.

If identical interest rate and money stock paths could be obtained through tight daily control of either interest rates or bank reserves, then it is useful to ask whether it makes any difference which instrument the central bank in fact controls. I am convinced that the choice of control variable does make an important difference in monetary policy because policymakers necessarily operate in an environment subject to broad societal and political pressures.

Those pressures seem to operate on a very crude information base. In recent months the objective function emphasized in the political process has placed great weight on the goal of less inflation. The general public believes that policy should be maintained in a restrictive stance, or an increasingly restrictive stance, until progress is made in reducing inflation. Because the Federal Reserve is controlling interest rates, such a stance *by definition* involves higher interest rates. However, the implications of higher interest rates for money growth are largely ignored in public debate over monetary policy.

If the Federal Reserve had been controlling the money stock instead of interest rates, then I believe that these same political pressures would have

called for a slower rate of money growth beginning in November. If the Federal Reserve had been controlling the money stock, it could have followed a policy responsive to the political pressures by, say, cutting  $M_2$  growth in half—surely a policy that would have met the public's definition of a more restrictive policy. Yet under that approach the Federal Reserve would have achieved growth of  $M_2$  of about 5 percent, rather than the 2.4 percent actually realized over the period since October.

Clearly, in responding to political pressures that simply cannot be ignored, it makes an enormous difference whether the day-by-day monetary policy target is an interest rate or a monetary aggregate. With the money stock determined by demand under an interest rate peg, no one could accurately predict how money growth would be affected by the November increase in the federal funds rate. However, even after observing the very low money growth that followed, political pressures to maintain a restrictive policy made it difficult for the Federal Reserve to consider reducing the funds rate in order to obtain money growth somewhat faster than 2.4 percent on  $M_2$ .

The political problem facing the policymakers will become even more painful if I am correct in my reading of current economic data and if additional data confirms this view among business cycle experts. Even when the Federal Reserve decides the time has come for higher money growth, it will find itself in a very difficult public relations position because reducing the federal funds rate to obtain higher money growth could be widely interpreted as a premature policy reversal.

Federal Reserve policy, then, must be understood as reflecting an interplay between the judgments of the economists and others within the Federal Reserve System and broad political pressures reflecting the preferences, anxieties, and fears of the general public. Today these factors are interacting to produce a response pattern that involves maintaining unchanged interest rate targets—and possibly even raising them—until it is obvious that lower interest rates are needed. That time will not arrive until it is evident to both the monetary authority and the general public that a recession is upon us.

### **Lessons to Be Learned**

The monetary policy response pattern sketched above is clearly inferior to other possible response patterns. If an interest rate rule reflecting this

response pattern were programmed into any of the major macroeconomic models, I am confident that the resulting instability would be far greater than what would be obtained in these models by a rule providing for steady money growth.

Since 1975 the Federal Reserve has declared targets for money growth. The targets announced on February 20, 1979, were for 1.5 to 4.5 percent growth for  $M_1$  and 5 to 8 percent growth for  $M_2$ . Given that the Federal Reserve has been holding the federal funds rate at about 10 percent even though money growth has been below declared targets for many months, it is simply ignoring its own monetary targets. Perhaps the monetary targets should be regarded as an empty ritual, but such rituals have their costs. Public officials should not make announcements about what they intend to do and then routinely ignore them because it is important that their serious announcements be believed. The Federal Reserve should either hit its announced targets or announce forthrightly that these targets are not targets at all but only vague expectations that have little bearing on actual policy.

The problems raised for discretionary policymakers by the absence of a well-defined response rule are nicely illustrated by recent events. Because interest rates follow a pro-cyclical pattern, declines in rates may reasonably be interpreted as a sign that the economy may be cooling, and vice versa. However, it is also true that over short periods interest rate changes may reflect substantial speculative activity, including that based on forecasts of what the Federal Reserve will do.

In the several weeks preceding April 17, interest rates on treasury bills rose substantially, reaching the 9.60 to 9.70 percent range in the week of April 9. If this increase was the result of an economy that is strengthening, continued tight policy may be warranted. On the other hand, if the increases in interest rates stemmed solely from speculation that the monetary authority would be following a tighter policy—speculation fueled by recent reports that some administration officials were pressuring the authority to follow a tighter policy—the interpretation of the rate increases is entirely different. Indeed, treasury bill rates dropped to the 9.10 to 9.20 range by early in the week of April 23 in response to the statement on April 16 by G. William Miller, Chairman of the Federal Reserve, which the market interpreted to mean that the economy was slowing and that no further credit tightening was planned at this time. Then, when the funds rate was raised slightly on April 27, the bill rate rose again, to about 9.60 percent.

In sum, because political pressures on the Federal Reserve are currently asymmetrical it is politically easy, and perhaps even politically imperative, for it to raise interest rates but difficult to lower them. Although predicting money growth is hazardous, my best guess is that this asymmetrical situation will lead to money growth on the  $M_2$  definition remaining below 5 percent, on the average, until after the cyclical contraction has begun.

The Federal Reserve's initial moves to lower the federal funds rate will not occur until it is fairly obvious that the recession is at hand, and the initial moves will be small and cautious. The weakening economy and the recognition that the monetary authority's policy is changing will produce sharp declines in money-market interest rates other than the federal funds rate; money growth will remain low as the Federal Reserve holds the funds rate above other rates. As the recession deepens, it will move the federal funds rate down more aggressively. At some point the funds rate will catch up with other money-market rates and money growth will begin to rise. I have no way of knowing how long this process will take. But I predict that when we look back a year from now, it will be clear that the sharp deceleration of money growth that began in November 1978 and continued into the early months of the cyclical contraction reflected a policy that was unambiguously inferior to a policy of adhering to the Federal Reserve's own announced money growth targets.

The current acceleration in inflation was caused, or at least exacerbated, by money growth in excess of the monetary authority's announced targets in 1976-78. If money growth below announced targets is now associated with recession, these two observations will offer further evidence that a policy of actually achieving monetary targets adjusted gradually over time promises better outcomes than a policy that ignores such targets.

## *Discussion*

IF POLICY were as restrictive as Poole suggested, reasoned David Fand, interest rates would have exploded in recent months when nominal GNP was rising sharply. Fand concluded that accelerated innovations in finan-