

CAN THE FED CONTROL MONEY?

Beryl W. Sprinkel

If it is generally agreed that in the long run inflation is a monetary phenomenon, then the simple answer to the question of whether the Fed can control money is—from my point of view—that I certainly hope so. I also believe that it is so.

Not even monetarists would argue that it is all that simple, however. Some might say it is the money supply per unit of output that matters. Over time growth rates in output may change and this may require some adjustment in money growth in order to achieve price stability. Monetarists do not believe that every change in the price level can be attributed to a monetary disturbance. In particular, in the short run, supply-side shocks which we have witnessed with increasing frequency in the last decade—crop failures, exchange rate movements, and so on—certainly cause changes in the price level in the short run. But even recognizing these qualifications, I think it is fair to say that in recent years the economics profession has moved toward believing that inflation is essentially a monetary phenomenon.

However, if money growth cannot be controlled by whatever means, a major disruptive factor both in our economy and in economies abroad is left outside the realm of government policy. Although many things are fortunately outside the realm of government policy, in the system we have today I do not think we can argue that monetary policy and inflation ought to be left outside the policy realm.

The issue is not simply and naively the physical ability of the central bank to determine the stock of money aggregates. There are several other issues that must be addressed. What, for example, is the purpose of attempting to control money growth? People of course recommend a variety of monetary goals. Some would say, and I would

Cato Journal, Vol. 3, No. 1 (Spring 1983). Copyright © Cato Institute. All rights reserved.

The author is Under Secretary of the Treasury for Monetary Affairs, Washington, D.C. 20220.

agree, that the goal should be long-run price stability. Some would argue that we should utilize money as a fine-tuning mechanism for frequent adjustments to affect aggregate demand. Some would argue that monetary policy should be aimed at particular problems in specific industries or sectors of the economy. Others would accept the idea of monetary control, but would propose alternative methods of control such as a price rule, interest rates, gold, exchange rates, or a quantity rule. Does it make any difference which control mechanism we choose in terms of the cost to the economy?

The proper question from my perspective is: Can the Federal Reserve under current law and initial conditions achieve and maintain secular price stability at acceptable cost by achieving prescribed targets for the quantity of some monetary aggregate? In this form, it seems to me, the question incorporates most of the elements that bear on the issue; that is, current law covers certain constraints which of course could be altered either to improve the precision of control or to reduce the cost of control. Financial deregulation, which is frequently in the form of a law, certainly causes noise in the system, measurement difficulties, and can create uncertainty about whether or not one is on target. Existing reserve requirements, whether or not they vary for different deposit categories, make a difference, and the way the discount rate is administered makes a difference.

Initial conditions are extremely important. If we start from a situation of price stability, it would be relatively easy to take the policy actions required to sustain that price stability. But, unfortunately, that is seldom where policymakers start. In the current situation, we must start with a history of policy deeds and misdeeds that markets do remember; that is, there is a state of expectations. Over the past three years, for example, the Fed has worked very hard to slow money growth rates on average. But that policy followed a period during which the trend of money growth had risen and prices and price expectations have moved upward secularly. Achieving and maintaining a sensible policy aimed at price stability is much more difficult in an environment in which expectations are that inflation will continue to accelerate.

What is likely to happen when you disinflate? In the short run, unfortunately, some undesirable things happen. The cost of returning to price level stability after an inflation is the cost of prior policies and is, to some degree, impossible to avoid. We know something about what happens to certain markets in periods of accelerating inflation, which is reversed during periods of decelerating inflation. We know, for instance, that accelerating inflation is typically accompanied by increases in real asset prices and rates of return on invest-

ment. Popular inflation hedges—land, paintings, gold, commodities—show very strong rates of return. We also know that in that environment nominal interest rates go up as inflation rises, but real rates—at least observed rates less actual inflation—frequently decline.

There is, it seems to me, frequent confusion about what a real rate is. The true real rate is, of course, the nominal rate minus the *expected* rate of inflation. Since we cannot measure the expected rate of inflation directly, there is a tendency to use the *observed* inflation rate. During a period of accelerating inflation, nominal rates do rise, but they frequently do not rise as quickly as inflation because expectations of inflation lag actual inflation. When the observed inflation rate is subtracted from the nominal rate, the “real rate” (so measured) therefore tends to decline. This behavior has accounted for many of the developments on the international front, as well as the domestic front, over the past decade.

When the inflation process is reversed, the “real rate”—again, *improperly computed as the difference* between the nominal rate of interest and the observed rate of inflation—frequently rises. Even today, after two to three years of disinflation, it is frequently stated that real rates are very high. Such an assertion assumes that individuals perceive that future inflation will be what the statistical indices say it is now.

For example, this morning it was reported that there was actually a decline in the inflation rate. Since the CPI tends to overstate the decline in inflation as interest rates go down, it is difficult to believe that average prices are actually falling. Certainly the inflation rate has come down very substantially, to something on the order of four to five percent. If you subtract that five percent from long-term government bond yields, which are about 10.25 percent, the result is a very high measured real rate. What this implies is that the marketplace does not yet believe that we have (or can keep) the inflation rate down to five percent. You cannot force people to believe in permanently lower inflation, they have to convince themselves. But the way that they convince themselves is to see that policymakers are serious about pursuing the kinds of policies needed to limit inflation to five percent or less into the future. In other words, real interest rates will come down *when and only when* the monetary and fiscal authorities pursue effective anti-inflationary policies.

Now there is the question of the cost of disinflationary policies, and the cost is very considerable. In both Western Europe and the United States, disinflation has been accompanied by rising unemployment and excess industrial capacity. It is indeed not a zero cost. But continuing to inflate is also not a costless option. If inflation were

to continue to accelerate, we would once again face the kinds of problems that were very evident two to three years ago—rising tax rates that eroded incentives to work and save, and incentives to engage in speculative activity rather than productive investment.

The goal of the Reagan administration, of course, is to *permanently* reduce inflation. And in my opinion the Fed has done a good job, on average, of decelerating money growth; indeed, they deserve much of the credit for getting the inflation under control. We have supported their policy, and I believe that, in general, reducing the rate of growth in money is why we have the inflation on the run at the moment.

Turning to the Fed's quantity targets, I personally would prefer a quantitative rule, as I believe the Federal Reserve would; I believe the sense of Congress—at least as expressed in the past—also points in that general direction.

There are numerous factors to be considered in controlling money even if you accept a quantitative rule. There is the issue of the precision of control of various aggregates, which can be expressed as the predictability of the multiplier. If policy actions are focused on controlling the monetary base or bank reserves, you must be concerned about the closeness of the relation between changes in that aggregate and changes in the money supply. But since it is not money growth *per se* that is of interest, you also want to know the relation between money and measured economic activity, such as nominal GNP and employment. Can you predict changes in velocity with reasonable certainty? Do such velocity changes show a similar pattern over time? To the extent they do not, then even if you achieve the desired growth of money, you will not have the desired effect on income and employment.

There are potential errors that can be made in targeting monetary aggregates. One that is very important today, and has been important for some months now, is the impact of financial innovation. Financial innovation and deregulation can induce large shifts of funds between competing financial instruments and deposits. These shifts can affect the money supply statistics, as funds are shifted into or within the monetary aggregates. Some would argue that we do not know what the true measure of money is. Is it M1, M2, M3, or some broader aggregate such as credit? I personally do not think that the important issue is to identify the "true measure of money." What is more important is that we establish a non-inflationary monetary target and, on average, stick to it; and that our policy have predictable effects on income and inflation.

There is also the question of the time horizon for monetary control.

As you know, the Federal Reserve sets annual targets for money growth which is a reasonable period of time. But we must also be interested in the longer-term trend of monetary growth. You may remember that the Reagan administration initially set long-term monetary targets in addition to targets for the first year. The administration wanted a *gradual* deceleration of the rate of growth in the monetary aggregates, consistent with the objective of getting inflation down.

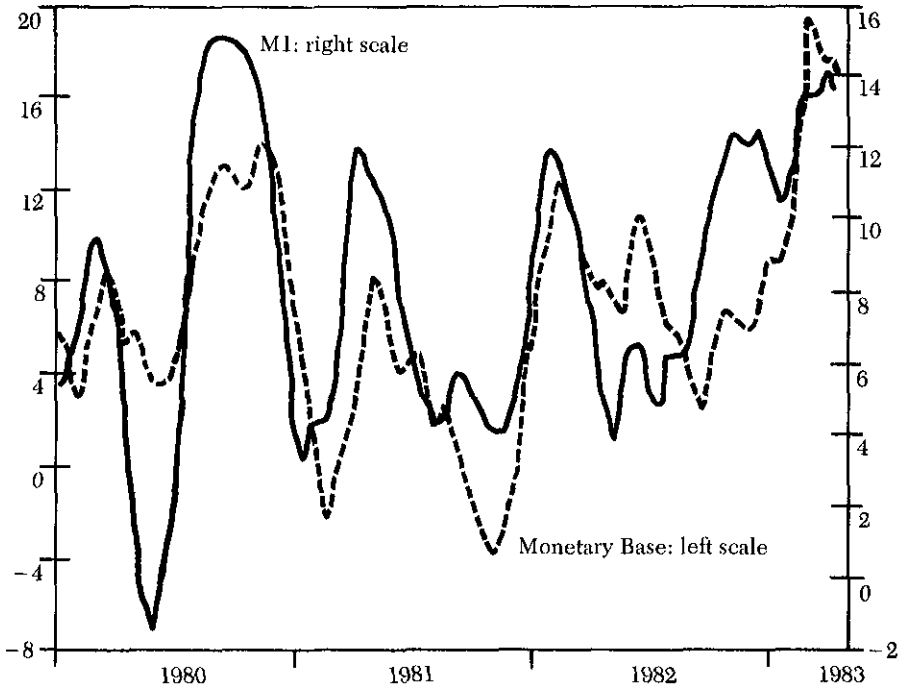
I now shall turn for just a moment to the interaction of monetary actions and public expectations. I think they are particularly important during this period of transition to disinflation. One of the major flaws, in my judgment, of attempting to control money through interest rate targets is that you do *not* establish the expectation that money growth will be stable. There have been many periods in the past when Federal Reserve actions focused primarily on controlling interest rates. I certainly agree with the Fed that we should not return to that sort of procedure; we should continue to hue to gradual reduction in the monetary aggregates.

I can remember 25 or 30 years ago when I used to argue that the public, economists in general, and the marketplace should pay some attention to money growth, at least over a six-month interval or so. But almost no one was interested in watching money growth. Now we have come to the opposite extreme. Every Friday afternoon markets all over the world tense up as if what happens to money growth in any one week is important. Of course, if you are in the Federal funds business, it is important. But if you are concerned about monetary stability and long-run price stability, weekly changes in monetary aggregates are certainly not important. Weekly changes in the money supply do not have any significant effect on long-run prosperity or on inflation. However, when too much emphasis is placed on short-run changes in money, adverse effects on expectations can develop.

What is the recommended method of controlling money? We all have our favorites and I have mine. Namely, I would like to see a steady predictable trend in some aggregate that the Federal Reserve can control, which suggests to me that it should be the monetary base, or if not that, bank reserves. The Fed, of course, may have short-run difficulties controlling M1 and M2, but they have total control over the base or reserves. Growth of the base, in turn, is closely correlated with money growth, as the accompanying chart illustrates. Base and money growth may diverge in the short run for a variety of reasons, but over the long run—the chart shows quarterly growth rates—growth of the monetary base is the ultimate constraint on

money growth. This relationship has held, over time, despite substantial changes in financial institutions and the economic environment.

GROWTH IN M1 AND THE MONETARY BASE



Growth is annualized rate over 13 weeks
Data are 4-week moving averages

Prepared by the Office of Monetary Policy Analysis, U.S. Department of Treasury

This procedure would not eliminate all the problems; shifting of funds into or out of the M's could still cause short-run distortions, especially when you have variable reserve requirements on the various components of the money supply. With certain institutional changes, however, I think the Fed's ability to control the money supply by focusing on control of the base or reserves could be improved. The Federal Reserve has announced that it intends (in early 1984) to shift to a version of contemporaneous reserve accounting, which I certainly applaud. Under the present system of lagged reserve requirements, it is more difficult for the Fed to control reserves or the base. Moving from lagged reserve requirements toward contemporaneous reserve requirements will reduce that problem.

Let me turn briefly from domestic monetary policy to the question of international monetary policy. We believe that the most important thing that the United States can do for the rest of the world in this field—and this is especially true because of our inevitable leadership role—is to create monetary stability; that is, the United States must create some certainty that the value of the dollar domestically will be maintained over time. Does that mean zero inflation? Not necessarily, but it certainly cannot mean the double-digit inflation that we have suffered in the recent past. If the dollar is going to be the reserve currency of the world, it is critically important that we do a good job of maintaining its value.

There is also a question about exchange rate stability. So far as I know, there are very few people, if any, who believe it is a good idea to have wild fluctuations in exchange rates—major movements over relatively short periods of time; certainly I do not. Such erratic swings in exchange rates affect incentives to trade, create arbitrary capital gains in the foreign trade sector, and generally destabilize markets. But how do we stabilize exchange-rate movements? Some have urged that we impose our view through massive intervention. The difficulty with that in the U.S. case is that the foreign exchange markets are extremely large. The dollar market is something on the order of one hundred billion dollars a day. Thus direct intervention by the Treasury and the Fed is not feasible on such a large scale, even though we do intervene in periods of what we believe are disorderly markets.

At the last economic summit President Reagan and Secretary Regan proposed that we make a greater effort to achieve better coordination of economic policies between the major nations. That proposal was accepted at Versailles and has been carried out. The instructions were for the finance ministers and the heads of the central banks to meet regularly with the managing director of the International Mon-

etary Fund to determine if policies were moving toward achieving reasonable price stability as well as economic growth. This practice has been put in place and will continue. One should not be so naive, however, as to believe that this process will force coordination of policies among independent nations. Nevertheless, it is a process through which our trading partners can become more aware of the impact that their policies have upon exchange rates. At the last summit Secretary Regan proposed that we take a look at the evidence of how successful policies of massive intervention have been in the past. That work is on track, and will be finished by the end of January 1983.

In conclusion, I want to emphasize that I do believe the Federal Reserve can control the monetary aggregates, but their ability to control the M's in the short-run is limited, especially in an environment of institutional change. I think we must focus on the variables that are first, most controllable, and then, most highly correlated with income growth. Lower interest rates, which we all want, will be a result of getting inflation under control; this can be accomplished only by establishing and maintaining noninflationary, predictable money growth. Returning to interest rates as a target, in my opinion, would only promote instability. The Fed has made excellent progress over the past three years in reducing average money growth, and this performance has improved their credibility. Finally, on the international side, it is our special obligation to promote monetary stability at home, even though there are many other areas of cooperative endeavor between nations, in which we have a responsibility to participate.