

# THE FED'S ANTI-INFLATIONARY STRATEGY: IS IT ADEQUATE?

*Address by  
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to the  
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It's a pleasure to be with you this afternoon to discuss some of the longer-run issues the Fed is confronting in conducting monetary policy. I am particularly happy to have the opportunity to appear before a group of economists who are actively engaged in business and commerce. The monetary policy decisions we make at the Fed have important effects on all business firms—industrial and other non-financial companies as well as financial institutions. Consequently, it is important that executives and managers in all sectors of the economy be at least generally familiar with the principal continuing issues and problems with which the Fed is grappling.

This is, of course, a particularly interesting period in our nation's recent economic history. On the one side, we continue to face a number of serious economic difficulties. The federal budget deficit, the trade deficit, and the international debt problem are perhaps the most obvious of these, but there are several others as we are all aware. At the same time, I think most people would agree that we've made considerable progress on a number of economic fronts since the tumultuous early years of this decade. We are now midway through the fifth year of the current business upswing, which is well beyond the average length of postwar expansions. Approximately 14 million new jobs have been added to the employment rolls during this period, and the unemployment rate has declined 4.8 percentage points from its recession high of 10.8 percent to its present level of 6.0 percent. Further, after peaking somewhere in the neighborhood of 10 percent in 1980 and 1981, the underlying trend rate of inflation has declined to about 4 percent.

## **Inflation as a Problem**

I would like to focus particularly on inflation today, because I believe that the System has a special

responsibility regarding the national goal of extending and then maintaining the recent progress against inflation. It is now almost universally agreed among economists that monetary policy has a substantial effect on the inflation rate over time, although there is still some disagreement over the significance of other factors. Moreover, many economists, including this one, believe that the inflation rate is the only economic variable the Fed or any other central bank can influence systematically over the long run and would therefore argue that price stability should be the preeminent goal of monetary policy.

Before we congratulate ourselves too vigorously about our success on the inflation front, let me make two points to help put this progress in perspective. First, even though the current underlying inflation of about 4 percent is certainly an improvement over the much higher rates of a few years ago, it is not a particularly admirable performance when judged against longer-run standards. Most of you probably recall that the Nixon Administration imposed a comprehensive wage and price freeze on the country back in 1971 when the inflation rate was actually a little less than 4 percent.

Second, and perhaps more importantly, there is no particular reason to expect this progress to continue automatically. Not too many months ago, it was not uncommon to hear some of the more optimistic in our midst proclaim that inflation had been conquered and was dead. It was as though the high inflation of the late seventies and early eighties had been some sort of exotic disease that had been eradicated by a new wonder drug. But clearly there is no good reason to believe that anything like this has happened. It doesn't matter whether one believes that inflation is caused by excessive growth in the money supply, or rising oil prices, or high labor costs, or whatever: there has been no fundamental

institutional change in our economy that would guarantee that inflation won't accelerate again. For example, if one believes that rapid money growth causes inflation, there has been no really basic institutional change in the monetary regime, such as a return to the gold standard or the adoption of some kind of Constitutional amendment, that might reduce the probability of sustained excessive monetary growth in some definitive way.

Some of the earlier apparent lack of concern about inflation has been replaced more recently with a rather sharp revival of concern, as evidenced by rising inflationary expectations in financial markets

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and corresponding increases in long-term interest rates. Some observers think these worries do not reflect a true increase in the underlying rate of inflation and are instead a premature reaction to the recent upswing in oil prices and the short-run effects of the depreciation of the dollar. This may be right, but, quite frankly, I was happy to see this evidence that the earlier “inflation is dead” mentality is on the wane.

If I am right in my assessment that inflation is still a problem, what does this continuing risk of inflation imply? Well, obviously it means that we need to take whatever preventive steps are necessary to keep inflation under control. The correct steps to take, in turn, depend on what factors are most likely to cause another round of high inflation. Let me confess right up front that I'm one of those people who believes that the evidence supports Milton Friedman's famous dictum that inflation is always and everywhere a monetary phenomenon. Consequently, I think the most effective thing we can do to reduce the risk of inflation is to take a hard look at the present strategy of Fed monetary policy and determine what we can do to improve it and, if necessary, repair it. Against this background, I'll focus the remainder of my comments on our strategy

at the Fed. I'll begin with a brief description of the strategy. Then I'll make a few comments about things I personally believe might be done to make it more effective. I should emphasize that the views I'll express are my own and don't necessarily reflect the views of anyone else in the Fed.

### Federal Reserve Operating Strategy

Let me begin with just a quick overview of the current strategy, which has been in place in one form or another since the mid-1970s. The essence of the strategy is that we try to control the growth of certain monetary aggregates over time in order to hold inflation in check and create the kind of stable monetary and financial environment that is conducive to high employment and steady growth in real economic production. As you know, the Federal Open Market Committee sets annual target ranges for the growth of several monetary aggregates—the familiar “M's” that get widespread attention in the financial media. The Committee establishes these ranges each year at its meeting in February for the year ahead. It then reevaluates the ranges at its meeting in July and makes any adjustments that appear appropriate in the light of events during the first half of the year. During the course of the year, the Committee seeks generally to hold the growth of the aggregates within their respective ranges, although the firmness of the Committee's efforts to achieve this objective may be affected by emerging developments in other areas of the economy. Because the Committee has no means of controlling the aggregates directly, it does so indirectly using certain short-run operating “instruments.” These instruments change from time to time, but they are all indicators of the relative ease or stringency with which the Fed is supplying reserves to depository institutions. Under the present procedure, which has been in place since the fall of 1982, the operating instrument has been the aggregate level of seasonal and adjustment borrowing at the discount window. The Committee sets a short-run objective for this instrument at each of its regular meetings, which are held at five- to six-week intervals.

That's a quick overview of the strategy. Now let me make three important points about the strategy, and then I'll go into a little more detail on each point in turn. The first point is that this procedure belongs to a particular class of strategies referred to as “intermediate target” strategies. In these strategies, as the name implies, the Fed does not set specific quantitative objectives for the final goal variables of economic policy, such as the rate of growth of real GNP, the price level, and the unemployment rate.

Instead, targets are set for variables that occupy an intermediate position between these goal variables and those we can control directly, such as the Federal funds rate or the rate of growth of reserves of depository institutions. The monetary aggregates the Fed currently targets are intermediate variables in this sense. We can't control them directly and precisely, nor are they final goal variables of monetary policy. I consider the use of monetary aggregates as intermediate targets especially appropriate because it is well established that there is a close relationship between the rate of growth of the money supply and the rate of inflation over the longer haul. Rapid money growth, in particular, leads to high inflation, while moderate growth is generally associated with low inflation.

The second point about the strategy is that we've been having some technical problems with it in recent years. The predictability of the statistical relationship between the key monetary aggregate known as M1, on the one side, and the growth of current dollar (or "nominal") GNP and the rate of inflation, on the other, has diminished significantly.<sup>1</sup> In any case, very rapid growth in M1 in both the 1982-83 period and more recently in 1985 and 1986 has not been followed—at least not yet—by the usual lagged rise in the rate of inflation. The reduced predictability of this relationship prompted the Fed to drop the M1 target in 1987, but I believe that this decision, even though it may be justified as a technical matter, has weakened the strategy because the M1 target has traditionally been one of the most important elements of the strategy.

The final point about the strategy is that it is and for many years has been a discretionary strategy as opposed to a strategy based on a rule, even though at a superficial level it has some of the appearances of a rule. It is discretionary in two senses. First, we do not use any predetermined mechanical formula in determining how to adjust the settings of our instrument variables to deviations of the monetary aggregates from their target ranges. Second, we do not give exclusive weight to such deviations in determining our instrument settings. On the contrary, we have taken into account the behavior of a number of other financial and economic indicators, including—at one time or another—long-term interest rates, foreign exchange rates, conditions in labor markets, and general business confidence. The relative weights we give the monetary aggregates and these other

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<sup>1</sup> M1 includes the public's holdings of currency and coin, demand deposits, and interest-bearing transactions deposits such as NOW accounts.

indicators in making our short-run policy decisions vary over time in an ad hoc, discretionary way. Indeed, the degree of discretion used in conducting policy is so great at present that a case could be made that the monetary targeting procedure is now more a broad framework than a true strategy.

### Implementation of the Strategy

Let me now elaborate a little on each of the three points I've just made.

*Intermediate Target Strategies* The first point was that targeting monetary aggregates is one of a class of intermediate target strategies. Some economists have argued that intermediate target strategies are inferior to other kinds of strategies because they insert a redundant intermediate target variable between the instrument variables that the Fed controls directly and the goal variables of policy in which we are really interested. Why not simply set a target for the unemployment rate, say, and then use an econometric model to determine what level of borrowed reserves is most likely to be compatible with that objective?

There are obviously several problems with such a strategy. At an operational level, the linkages between the Fed's instruments and the goal variables of policy are lengthy and complex. It is not at all clear that these relationships could be captured by econometric models accurately enough to make them operationally useful. The relationships between the instruments and the monetary aggregates, in contrast, are simpler and more direct, and they have been analyzed exhaustively over a long period of time.

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More fundamentally, as I have already suggested, many economists believe that the Fed cannot systematically influence real variables like the unemployment rate and real GNP over time. Following this line of reasoning, the only goal variables the Fed can influence systematically over time are the price level and inflation. Building a strategy

directly around the relationship between instrument variables and the inflation rate is probably possible in principle, and it may well be the best strategy available in a period when institutional or other changes have temporarily reduced the effectiveness of other strategies. But such a strategy might be difficult to implement permanently in practice, since the lag between the time the Fed changes one of its instrument settings and the time the move affects the price level is long and variable. Viewed in this light, the introduction of intermediate variables such as the monetary aggregates has considerable appeal, both from an operational standpoint and from the standpoint of explaining the strategy to the public. My personal feeling is that, as a practical matter, our best option is to stick with some form of intermediate target strategy.

*Recent Technical Problems in Targeting Aggregates*  
This brings me to the second point I mentioned above: the technical problems we've encountered recently with our strategy of targeting monetary aggregates. As I've already noted, the predictability of the empirical relationship between (1) the growth of M1 and (2) the growth of nominal GNP and inflation has diminished significantly in the 1980s. Another way of saying this is that the "velocity" of

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M1 has been behaving unpredictably. The velocities of the broader M2 and M3 aggregates have also been more difficult to predict, although the deterioration here has been less than in the case of M1. Considerable research has been done within the Fed and elsewhere to determine what has caused this problem. This research has not yet yielded definitive results, but it has produced several plausible partial answers. First, the removal of restrictions on the interest ceilings on most classes of deposits is believed to have increased, at least temporarily, the responsiveness or "elasticity" of the public's demand for money balances to changes in short-term market

interest rates. Thus, movements in interest rates now generate a proportionately greater change than earlier in the demand for money. Such changes in money demand affect the growth rates of the monetary aggregates resulting from particular settings of the Fed's instrument variables. Further, M1 now includes a large proportion of interest-bearing accounts that the holders probably use for saving and investment as well as transactions purposes. Consequently, the demand for M1 balances probably responds differently to changes in household wealth, interest rate spreads, and other variables now than it did a few years ago when M1 consisted primarily of currency and non-interest-bearing demand deposits and was therefore a fairly undiluted measure of transactions balances. Finally, the sharp and largely unanticipated reduction in inflation in the early eighties may have increased the public's appetite for money balances, in relation to its desire to hold other liquid assets, since lower inflation erodes the real value of money balances more slowly.

Any or all of these factors may explain at least in part the change in the observed relationships between the growth of the monetary aggregates and other economic variables. In any event, these developments raise pressing questions regarding the continued viability of our strategy of targeting the aggregates, at least in its present form. We obviously need to know whether the reduced predictability of the relationships between the aggregates we've been targeting and the economy is a temporary phenomenon that is part of the transition to a less regulated, less inflationary environment or a more permanent development. The answer to this question just isn't very clear yet. My personal guess, for whatever it's worth, is that the relationships will become more predictable again after the transition is further behind us. For example, the practices banks and other depository institutions follow in setting interest rates on interest-bearing transactions deposits are likely to become more settled and systematic in relation to movements in market rates than they are at present, which would increase the predictability of the reaction of the monetary aggregates to movements in market rates. In these circumstances, we should be able to continue focusing on the traditional monetary aggregates, including M1.

If I'm wrong, however, and the predictability of some or all of these monetary relationships remains low, we may have to make changes. This could occur in several ways. As I've already suggested, the reduced predictability of the relationship between

the narrow M1 aggregate and the economy has been especially troublesome. The decline in the predictability of relationships between the broader M2 and M3 aggregates and the economy has been less dramatic, presumably because some of the short-run shifting of funds between different classes of deposits and other liquid assets that affects the behavior of M1 washes out in the case of the broader measures. This is why the Fed has continued to target M2 and M3 this year, even though we've dropped the M1 target for the time being. If this situation continues, we could simply drop M1 permanently and focus henceforth on M2 and M3, although many of us would be disappointed by such a step since both M2 and M3 are rather amorphous collections of assets that lack the intuitive appeal of the less-cluttered M1 measure and are likely more difficult to control.

If all three of the aggregates on which we've traditionally focused continue to give us trouble, we may have to seek other alternatives. A number of possibilities exist. One is the monetary base, which is loosely the sum of currency and coin outside depository institutions and total reserves at the Federal Reserve. Another is what is now called M1A—non-interest-bearing demand deposits held by the public plus currency and coin outside depository institutions. M1A corresponds closely to what we used to call M1 before we redefined M1 a few years ago to include the interest-bearing transactions deposits that have become so popular in the 1980s. The predictability of the velocity of M1A, like that of the other aggregates, dropped sharply in 1981 and 1982, which was the period in which the initial deregulation of interest rate controls on transactions deposits occurred. There is evidence, however, that the velocity of M1A, unlike the velocities of M1, M2 and M3, has resumed a more normal and predictable pattern. My personal feeling is that this evidence suggests that we in the Fed should take a close look at the possibility of establishing a formal target for M1A.

The main point I want to make in this context, however, is not that one particular aggregate is better than another. The important point is that there is no compelling reason to believe that the deregulation of interest rates and the other developments of recent years have made it permanently and generally impractical to target monetary aggregates. The close positive relationship between the growth of the money supply and the rate of inflation over time is one of the longest-standing and most reliable relationships in economics. I see no reason to believe that this relationship has been destroyed in any permanent way by events in the 1980s. This implies

that even if M1, M2 and M3, as they are currently defined, have all been rendered less useful as monetary targets, there is still some monetary aggregate out there somewhere that we *will* be able to rely on once the dust settles. What we have to do is identify it, and I'm confident we have the means to do that.

*The Discretionary Nature of Policy* Let me turn now to the third point I made earlier about our present monetary policy strategy—its highly discretionary nature. This may surprise some of you mildly, since there has been a lot of loose talk in the financial

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press in recent years about how the Fed has adopted a “monetarist” approach to policy, which would involve, of course, emphasis on adhering to pre-established rules in conducting monetary policy.

Much of this comment has been inaccurate or at least misleading. This is not the place to go into a detailed technical review of the recent conduct of monetary policy, but let me make a couple of quick comments that I hope will help clarify the situation in case any of you have been misled. All the talk about the Fed “going monetarist” started in October of 1979, when, in the face of rapidly accelerating inflation, rising inflation expectations, and deteriorating conditions in both domestic and international financial markets, the Federal Open Market Committee decided to change its operating procedures in order to improve its performance in controlling M1 and the other monetary aggregates. The basic change was to drop the Federal funds rate as the principal operating instrument for controlling the monetary aggregates and replace it with nonborrowed reserves. There's no doubt in my mind that the Committee made a more determined effort to control the growth of the aggregates in late 1979 and in certain periods during the early 1980s than it had earlier.

Further, the new operating procedure using nonborrowed reserves had some features that at times permitted money market conditions to tighten in a semiautomatic way in reaction to above-target growth in the aggregates. But these changes did not by any means amount to the adoption of a monetary policy rule in the sense in which monetarists, or other economists for that matter, use the term. Further, the semiautomatic features of the nonborrowed reserve operating procedures used between 1979 and 1982 are not present in the current operating regime, which, as I pointed out earlier, uses the level of seasonal and adjustment borrowing as the operating instrument.

### Conclusion

Now let me say as clearly as I can that this question of whether the longer-run strategy of monetary policy should be discretionary, in the sense in which I defined the term earlier, or based on a rule of some kind is without any doubt *the* most important standing issue in the field of monetary policy today. Fed monetary policy has been essentially discretionary ever since the famous Accord between the Fed and the Treasury in 1951. This revealed preference for a discretionary strategy is easy to understand. In reality the Fed is under continuous pressure from the political establishment and other quarters to take or not take particular actions, despite the institutional safeguards designed to shield the Fed from such pressures. In this kind of environment the leadership of the Fed understandably finds useful the flexibility afforded by a discretionary strategy.

The case for the adoption of a rule, however, is growing stronger. A great deal of new research has been done on this rather old topic in recent years, and the results of a majority of these studies favor a rule. In particular, important theoretical papers published by Robert Barro and David Gordon in 1983, which built on earlier research by Finn Kydland and Edward Prescott, concluded that discretionary strategies are inherently inferior to those based on rules since they inevitably produce more inflation over time with no compensating reduction in unemployment. The general ideas underlying this result are, first, that discretionary policies affect the real economy only to the extent that policymakers are able to surprise the public—that is, take actions that the public doesn't anticipate—and, second, that the ability to surprise the public dissipates over time. Against this background, many economists believe that the contribution the Fed can make to the nation's economic stability would be enhanced by the

adoption of a rule, and I'm inclined to agree with this conclusion. Exactly what form such a rule should take and how it should be institutionalized, of course, are major practical issues that would have to be resolved before any rule could be adopted, and I have no quick and easy answers to these questions. I would point out, however, that the best rule might not necessarily be a constant money growth rule, which is what discussions of a rule often bring to mind. There are other kinds of rules, many of which permit more activist responses to deviations of important economic variables from their desired paths. For example, the rule might tell the Fed to adjust the target ranges for the aggregates if the inflation rate or some other important economic variable began to go off track. Whatever the form of the rule, it would be essential, of course, that it be built around and derived from our overriding objective of controlling inflation.

Let me just say that I've been intrigued by the issue of discretion versus rules in the conduct of monetary policy for many years. My instinct has always been that some kind of a rule would give us better results, no matter how noble our intentions might be in pursuing a discretionary approach, because of the precommitment a rule would involve and the beneficial impact this precommitment would have on the credibility of our anti-inflationary strategy. I don't pretend to comprehend all of the technical aspects of the recent research in this area, but I understand enough of it to be impressed by it, and what I do understand has reinforced my conviction that the adoption of a rule would be beneficial. I suspect the main problems in adopting and implementing a rule would not be technical but political. A procedural change of this magnitude would require at least the tacit support of a majority of the members of Congress as well as the key people in the Executive Branch. Getting this support would undoubtedly be difficult because the adoption of a rule by the Fed would almost certainly be seen as presenting political risks. In this bicentennial year of the Constitution, however, it is perhaps not yet unrealistic to believe, as I do, that our nation is still capable of putting institutional constraints on itself when they are clearly in the public interest. And, as I've indicated, the evidence is building that a monetary rule is in the public interest. I can think of no other reform that would do more to help us maintain the progress we've made in reducing inflation over the last five years.

## Summary

That's all I wanted to say, so let me just briefly review the main points I've tried to make. First, I noted that the possibility of a revival of inflation is still a major risk in the economy. I concluded that this risk justifies a careful reevaluation of the strategy of Fed monetary policy to determine how it might be changed, if necessary, to ensure that it is an effective anti-inflationary weapon. Against this background, I then went on to describe the present strategy, and I discussed several of its important aspects. First, I pointed out that the present strategy is an intermediate targeting approach, and I expressed support for this general set of procedures despite its criticism by some economists. Second, I described some of the technical problems we are currently experiencing with the monetary aggregates we have been using as intermediate target variables, and I discussed some alternative variables we might con-

sider substituting for these aggregates if this becomes necessary. Finally, and perhaps most importantly, I pointed out that the current strategy is a discretionary one, as opposed to one based on a rule. I then concluded that recent research has strengthened the case for a rule, but I cautioned that any serious effort to institute a monetary policy strategy based on a rule would confront some thorny practical issues. My own feeling, however, is that the adoption of some form of rule, with the precommitment a rule would entail, would do more to improve our strategy, enhance our credibility as an inflation fighter, and maintain our recent progress against inflation than any other single change we might make. I personally hope that we shall begin to move in this direction soon. The time to confront the risk of another round of high inflation is now, when the rate is still relatively low. Once the rate begins to accelerate, it will be too late.