### Has Monetarism Failed? - The Record Examined

Speech by DARRYL R. FRANCIS, President,
Federal Reserve Bank of St. Louis,
Before the Indiana Association of Certified Public Accountants,
Southern Indiana Chapter, Evansville, Indiana, February 23, 1972

AM PLEASED to have this opportunity to discuss with you some of the problems of economic stabilization. As government grows larger, it becomes both a potential stabilizer and destabilizer of the economy. Individuals bear higher and higher costs of economic instability, particularly in the form of unemployment and inflation. It thus becomes imperative that the economic profession, along with policymakers, investigate all alternative theories of stabilization and consider all available policy recommendations.

In recent years, doctrinaire and political bickering have clouded the use of a scientific approach to economic stabilization and have hindered the consideration of some actions which may offer acceptable solutions. Recent attacks on monetarist views of economic stabilization are a case in point, and I would like to examine the merit of these attacks.

For a number of years, I have accepted the description of economic behavior which is summarized by the "monetarist tradition" and, since my appointment to the presidency of the St. Louis Federal Reserve Bank in 1966, I have advocated stabilization policies consistent with this tradition. I would like to emphasize that my stance is not merely a belief, but an outgrowth of empirical observation and testing. This does not mean that I necessarily accept all the tenets or all the pronouncements of monetarists. But the work and research that has been done at our Bank for the past thirteen years has produced overwhelming evidence which has helped to confirm my views of the functioning of our economy and of the proper conduct of economic stabilization efforts.

Attacks on monetarist positions are not new, but recently they have become particularly strident, although no more precise than in the past. Examples of such criticism can be found in both the widely read popular press and professional publications. Paul A. Samuelson, a prominent economist and Nobel prize winner, said in a *Newsweek* column last summer (August 2, 1971), and I quote:

There are monetarists advising the President who genuinely believe that the rapid growth in the money supply so far in 1971 is bound to lead to rapid rates of money and real growth, far beyond what the bulk of the forecasters expect. All the President needs is patience. This raises the question as to why the President has confidence in such advisers. It is no secret that the forecasting ability of monetarism is selling at a huge discount on the markets of informed opinion.

And again in a DePaul University publication, Issues in Fiscal and Monetary Policy: The Eclectic Economist Views The Controversy, Samuelson states:

. . . in none of the modern sciences would it be respectable to believe in the pseudopositivism which prevails among the monetarists. It makes one ashamed for one's science, and provides us with still another reason why the peculiar tenets of monetarism have to be rejected.

Federal Reserve Board Governor Andrew F. Brimmer, in a paper entitled "The Political Economy of Money: Evolution and Impact of Monetarism in the Federal Reserve System," delivered at the Eighty-Fourth Meeting of the American Economic Association on December 27, 1971, concludes:

. . . I am convinced that it would be a disastrous error for the Federal Reserve to try to conduct monetary policy on the basis of a few simple rules governing the rate of expansion of the money supply. In

<sup>&</sup>quot;Reflections on the Merits and Demerits of Monetarism," in Issues in Fiscal and Monetary Policy: An Eclectic Economist Views the Controversy, ed. James J. Diamond (DePaul University Press, 1971), p. 21.

the first place, I find serious deficiencies in the theoretical and empirical analysis on the basis of which the monetarists reach their conclusions and policy recommendations. Put quite simply, they have not demonstrated convincingly that the relationship between the money supply and economic activity is especially close.

An article in the *Business Week* magazine of December 11, 1971, states:

For the second year in a row, the monetarists followed their theory to an erroneous conclusion. They expected the economy to be stronger than it was, and they were looking for a pronounced subsidence in inflation.

As mixed and oblique as these criticisms are, they nevertheless have received a great deal of attention in the popular press and are instrumental in molding public opinion.

The criticisms mentioned here, as well as those appearing elsewhere, seem to make two separate and distinct points: one, that the monetarist description of economic behavior, that is, theory, is incorrect, and two, that monetarist policy recommendations have been followed in recent years and have not produced the desired results. These two assertions have led many to conclude that the monetarist view should no longer be given serious consideration in economic stabilization efforts.

I think it is time to take a hard look at the record and let you draw your own conclusions. The record I wish to discuss is that compiled by the Federal Reserve Bank of St. Louis. Although firmly in the monetarist camp, it may not represent all monetarist thought nor all of its policy recommendations.

In order to provide some background for the examination of the record, I shall first briefly describe the body of thought referred to as the "monetarist tradition" and the stabilization policy implications generated by this view. Next, I shall discuss the record of economic predictions emanating from St. Louis research as a test of the validity of the monetarist view of economic processes. Then, I will examine the public record of monetary policy decisions to ascertain the extent to which monetarist recommendations were put into effect. Finally, I will offer some prognostications about the future of stabilization policy.

## Monetarist Approach to Stabilization Monetary Goals

Let us now review the "monetarist tradition." The monetarist view is not new — it can be traced back at least as far as David Hume in the 17th century and

has its roots in all accepted theories of economic behavior. Recent interest in this view is primarily a reaction to the thirty-year dominance of Keynesian thought and the depression-oriented policies which held sway during that period.

In capsule form, the monetarist view is the following. In the long run the growth of output and employment is determined by the growth of resources of a society. The price level is simply the rate at which money can be exchanged for this output. The trend growth of prices is determined by the trend growth of money stock relative to growth in output. Thus, the rate of inflation and the value of total nominal spending are dominated by the quantity of money supplied.

Deviations from a trend rate of growth of money, however, cause short-run deviations in output and employment. A departure of the money stock from a given trend affects spending within approximately one year. If this change in money growth is sustained, it will result in a change in the rate of inflation which will be fully manifested in approximately five years. During this period of adjustment to a new rate of inflation, output and employment growth will be changed. But once the adjustment is completed, output and employment will resume their longer-run growth paths.

The implications of this behavior are more complex than is apparent at first glance. A sustained increase in the growth rate of money will generate inflation and inflationary expectations. An attempt at slowing inflation by reducing the rate of money growth will decrease output and employment temporarily, but given inflationary expectations, insistence on higher wages and prices will remain for some time. Thus, a response in spending will result in a decline in output and employment but not an immediate decline in the price level. This is the way in which inflation and larger unemployment can and do exist simultaneously for some time.

The policy implications of this view are relatively simple. Since the time lags of the response of total spending, output and the price level to a monetary shock are of various lengths, with some being relatively long, monetary policy should not be used for "fine tuning" the economy. An attempt to increase output in the short run by accelerating the growth of money will result in inflation; an attempt to reduce inflation by decelerating the growth of money will, in the short run, result in unemployment and continued inflation.

One might infer from this that monetary policy is totally ineffective. On the contrary, it is extremely effective, but its use as a short-run stabilizing tool produces costs in terms of lost employment and output and undesired price level movements. On the other hand, its long-run effects are powerful *and* tend to minimize these costs.

By pursuing a steady and moderate growth of money, we can assure that inflation and expectations of inflation do not develop. This would assure that inflationary premiums on wages, prices and interest rates do not interfere with any adjustment process. Other policies can more appropriately be used to correct short-run fluctuations in output and employment, and they will be much more effective if expectations of price level movements do not interfere. Thus, the fundamental policy implied by monetarist thought is a steady trend rate of monetary growth. It must be noted that this rate may be chosen to produce no inflation whatsoever or some predetermined rate of inflation, if so desired.

#### Monetary Tools

In order to produce this relatively stable growth, monetary authorities must be able to control the money stock. It is our view that the money stock can be controlled by regulating its ultimate source — one of the several variants of the monetary base. Much criticism is leveled at the monetarists with respect to this facet of the theory. But this control mechanism is not unique to monetarist thought. Irrespective of whatever theory of income determination one subscribes to, regulation of the money stock can best be accomplished by producing desired movements in the monetary base.

Unfortunately there are critics who contend, with little empirical evidence, that the money stock cannot be controlled with any precision. Therefore, they conclude that monetary policy can make little contribution to economic stabilization efforts. These critics usually assume that controlling interest rates is synonymous with controlling the money stock. Such a statement is equivalent to saying that the amount of beef sold can be affected by the regulation of the price of pork. There is no doubt that they are interrelated, but precision is definitely lacking. Since the monetary base is almost totally dependent on Federal Reserve policies, and since it is very closely correlated with the money stock, the regulation of both is possible and feasible.

To sum up, the monetarist view, as developed and tested at the Federal Reserve Bank of St. Louis, implies a monetary policy which is directed towards a relatively steady growth of the money stock controlled through regulation of the monetary base.

#### The Validity of St. Louis Hypotheses

I will now examine the validity of the allegation that the monetarist concept of economic behavior bears little relationship to reality. All our behavior can be described by some kind of theory. For example, we are told that by pressing the accelerator pedal in an automobile we can increase its speed. A description is given to us which relates the pressure on the accelerator to injections of gas, other internal workings of a car and all external conditions. This constitutes a theory.

Now how do we know whether the theory is true or false? Essentially, we go out and test two hypotheses: one, that the speed of the car will indeed increase if the accelerator is pressed, and two, that it won't. Our test consists of actually pressing the accelerator and observing the response. The result which occurs with the greatest frequency would determine the theory to be accepted, and until proven otherwise, we would behave accordingly.

The point of all this is that economic theories are tested in the same manner. We accept or reject a hypothesis on the basis of its ability to predict, as compared with some alternative hypothesis. If monetarist theory predicts total spending, prices and output as well or better than other theories, then it may not be rejected as an appropriate description of such economic behavior. The crux of the matter, then, is the success of the theory in the explanation and prediction of those selected variables.

With this background, let us examine the predictions that were generated by the monetary research of the Federal Reserve Bank of St. Louis. The success of these predictions will help us to evaluate the validity of our view of economic processes.

In order to avoid the usual innuendos that accompany debates about forecasts, I will restrict myself to predictions which are of public record, that is, published materials. Until 1969 the Federal Reserve Bank of St. Louis did not have a formal forecasting model, but some earlier publications of the Bank did include qualitative predictions, analyses and recommendations which were made on the basis of the monetarist tradition.

In December 1966 we suggested that despite the restrictive monetary actions of the last eight months of 1966, the lagged effects of the rapid monetary expansion of late 1965 and early 1966 would cause

inflation to continue. The price level rose by 3.2 percent from 1966 to 1967.

In April 1967 we predicted that the restrictive monetary actions of 1966 would cause a decline in output in late 1967, while the rapid monetary expansion of early 1967 would put additional fuel into inflation in 1968. The rate of growth in output declined from 4.4 percent in the middle of 1967 to a 2.8 percent rate in the last quarter of 1967. The rate of increase in the price level accelerated to 4.6 percent per annum in the fourth quarter of 1968.

In September 1967 we predicted that the rapid monetary expansion of 1967 would cause inflation to continue unabated even if the proposed surtax were adopted. The surtax went into effect in July 1968, and inflation continued at a 4.7 percent rate through 1968.

Our first forecast based on a formal model was published in April ½970, although it was made earlier in the year.<sup>2</sup> At that time, the predictions for 1969 were made on the basis of data in existence prior to 1969, and the following two years were forecast on the basis of information available in 1969.<sup>3</sup> During a period of a forecast there occur many unforeseen natural, political and economic events which affect behavior and which inject errors into a forecast. Thus, most of the economic forecasters update their information to take account of these external shocks. But since the monetarist approach assigns pervasive, but not total, importance to the growth rate of money stock, our forecasts must be based on various assumptions concerning this growth.

Since a 6 percent growth figure most closely approximates the actual rate of increase in the money stock during the last three years, I shall use forecasts associated with that rate. As an alternative, I have chosen the so-called "consensus" forecast. It is a consensus of many economists, espousing many different theories and many different methods of prediction. Historically, it has been consistently more accurate than the individual forecasts which make up the consensus, and I would like to make my case with the

strongest alternative. Obviously, this choice does not permit us to reject other views of economic behavior, but it provides a strong test of whether the monetarist view should be rejected, as it has been by many observers.

At this point I apologize for the liberal use of numbers that I have to resort to. But the point must be made with comparative prediction figures. So if you will bear with me, I shall make these comparisons for the years 1969, 1970 and 1971. The forecasts of our model are selected so as to be consistent with the consensus frame of reference.

In the GNP forecasts, the predictions and actual figures are for the fourth quarter of the respective years. For the last quarter of 1969 we predicted a GNP level of \$957 billion. Our forecast was \$9 billion above the actual level, while the consensus forecast was \$8 billion too low. For the fourth quarter of 1970 our prediction was \$997 billion, or \$9 billion too high. The consensus was \$19 billion above the actual figure. For the end of 1971 the St. Louis prediction was \$1077 billion. It overshot its mark by \$4 billion, compared with a \$7 billion shortfall by the consensus.

	The I	Record of	Prediction		
		St. Louis!	Consensus <sup>2</sup>	Actual	
1969	GNP (Billions) 8	\$957.2	\$940.0	\$948.0	
	Prices <sup>4</sup>	4.1%	3.5% (6.0) 4	5.1%	
	Unemployment <sup>2</sup>	3.5%	4.1%	3.6%	
1970	GNP	\$997.2	\$1007.0	\$988.4	
	Prices	4.6%	4.0% (5.6)	5.7%	
	Unemployment	5.4%	4.6%	5.9%	
1971	GNP	\$1076.9	\$1066.0	\$1072.9	
	Prices	4.0%	4.0% (3.3)	3.4%	
	Unemployment	5.7%	5.6%	5.9%	

St. Louis predictions were made in "A Monetarist Model," this Review (April 1970), pp. 18-19. These predictions are based on the assumption of 6 percent money growth.

<sup>2</sup>Consensus predictions are from J. A. Livingston, American Banker, December 30, 1968, December 29, 1969 and December 28, 1970.

<sup>3</sup>GNP predictions and actual figures are for the fourth quarter of the year.

\*Rate of change of prices for St. Louis predictions is the change in the GNP deflator from fourth quarter to fourth quarter, and the "actual" figure is GNP deflator. Consensus' price predictions are for the consumer price index from December to December. Actual consumer price index changes are in parentheses.

<sup>8</sup>The St. Louis predictions and the actual rate are for the fourth quarter, while the consensus prediction is for December.

<sup>2</sup>Leonall C. Andersen and Keith M. Carlson, "A Monetarist Model of Economic Stabilization," this *Review* (April 1970), p. 7.

For the unemployment rate, our predictions and the actual rates are for the fourth quarter of the respective years, while consensus' forecast is for December. We predicted that the unemployment rate would be 3.5 percent in late 1969, while the consensus said 4.1 percent, and the actual rate was 3.6 percent. For the end of 1970 we projected 5.4 percent, consensus 4.6 percent, and the actual was 5.9 percent. For the end

<sup>&</sup>quot;Even though 1969 was "predicted" in 1970, the forecast was made strictly on the basis of data available through 1968, and no adjustments of known events were included. For example, if this Bank had been making quantitative predictions in 1968, this would have been our prediction.

<sup>&</sup>lt;sup>4</sup>J. A. Livingston, American Banker, December 1968, 1969 and 1970.

of 1971, we forecast 5.7 percent, consensus 5.6 percent, and the actual was 5.9 percent.

In predicting the rate of increase in price levels, I will use the rate of change in the GNP deflator from fourth quarter to fourth quarter, while the consensus used a December to December change in the Consumer Price Index. Our predictions must be compared with the corresponding actual GNP deflator and the consensus' forecasts with the corresponding actual Consumer Price Index. For 1969 we projected a price level change of 4.1 percent, while the actual was 5.1 percent. Consensus projected 3.5 percent, while the actual was 6 percent. For 1970 our prediction was 4.6 percent and in reality prices rose by 5.7 percent, consensus forecast an increase of 4 percent, while the actual rate was 5.6 percent. For 1971 we predicted an increase in prices of 4 percent and the actual was 3.4 percent, while the consensus predicted 4 percent and their actual change was 3.3 percent.

You can see that St. Louis predictions were consistently closer to actual figures, except in the 1971 price prediction, where they were the same, and in the 1969 GNP forecast, where the consensus did a shade better. Please also remember that the St. Louis forecast for each of the last three years was reported in April 1970, while the consensus' was made in December of each preceding year.

Given this record, I cannot see how the monetarist view can be rejected as having "... not demonstrated convincingly that the relationship between the money supply and economic activity is especially close." I have deliberately chosen as an alternative hypothesis a consensus of many views. By using the generally accepted criterion of acceptance or denial of hypotheses, we cannot reject all other views as being false, but we certainly cannot reject the view that the relationship between the money supply and economic activity is at least as predictable as the relationships incorporated in these other views. The existing record, I believe, supports this beyond a shadow of a doubt. It has not been proven that the growth of money stock is all that matters. On the other hand, I believe that there is overwhelming evidence that policymakers can disregard money growth only at the peril of their policies.

I would like to stress that a forecast which is based on the influences of money stock does not automatically produce correct predictions. One recent example was a monetarist forecast of a 1971 GNP of \$1,065 billion, while the actual GNP turned out to be \$1,046.8 billion. Our methods, which we have consistently ap-

plied since 1969, predicted a 1971 GNP of \$1,046 billion.<sup>5</sup> This prediction was made in early 1970.

I also would like to call to your attention that our forecasts have been better for longer periods than for quarter-to-quarter movements. However, I believe that stabilization efforts are best implemented over a longer-time horizon.

# The Success of Monetarist Recommendations Have Monetarist Policies Been Implemented?

Let us now examine the second criticism implied by many current writings — that policy recommendations arising out of the monetarist view have been followed and have produced an untenable situation consisting of simultaneous inflation, unemployment and international crises.

Before proceeding further, let me review the monetarist policy recommendations. As described earlier, there are only two—that the money stock should grow at a steady, moderate rate and that this rate of growth can be best produced by controlling the growth rate of the monetary base. The money stock does not have to grow at an absolutely constant rate week after week, but an average rate within a quarter must be within agreed-upon tolerances.

Let us now consider if these recommendations were accepted and enacted by policymakers. Evidence must be produced that such was the case, if the claims of our critics are to have any validity. So let us again look at the record.

In terms of long-term growth, or a trend if you please, the money stock grew at a 1.7 percent rate from first quarter 1952 to third quarter 1962, at a 3.7 percent rate from third quarter 1962 to fourth quarter 1966 and at a 6.1 percent rate from fourth quarter 1966 to second quarter 1971. This can hardly be considered a steady long-run growth.

Moreover, there have been substantial short-run variations in the rate of monetary expansion since 1968, a period when monetarist policies supposedly were followed. The yearly rate of growth during 1968 was 7.4 percent with a quarterly range between 5.6 and 8.8 percent. During 1969 it was 3.9 percent with a range of 1.6 to 7.3 percent. Then, during 1970 it grew at a 5.1 percent rate with quarterly growth ranging between 4.2 and 6.6 percent. And in 1971 the course of monetary expansion diverged the most from monetarist prescription. Average growth was 6.6 per-

<sup>&</sup>lt;sup>5</sup>On the basis of 6 percent money growth.

cent with a quarterly range of 0.4 to 11.3 percent. I think the record shows conclusively that the monetarist recommendation of steady monetary growth was not put into effect.

#### Has There Been An Attempt to Implement Monetarist Policy Recommendations?

As mentioned earlier, the second major recommendation is that growth of the money stock be controlled through management of some version of the monetary base. This base, which consists of the reserves of commercial banks and cur-

rency held by the nonbank public, is almost totally determined by the buying, selling, and lending transactions of monetary authorities. These transactions are solely the prerogative of policymakers. The relation between the monetary base and the money supply, on the other hand, is determined by the behavior of the public, banks, and the Treasury. The bone of contention between competing theories is the stability of this relationship. Our evidence concludes that this relationship is relatively stable and predictable.

On the other hand, the critics argue that it is not. They contend that the money stock cannot be controlled because it depends primarily upon economic activity rather than upon the actions of policymakers. Thus, the critics may argue that monetary authorities tried to control money but were unsuccessful.

But our discussion at present is not concerned with whether changes in the monetary base do indeed cause desired changes in the money stock, but whether the policy recommendations of the monetarist view have been put into effect or at least attempted. Namely, have policymakers attempted to regulate the level of the monetary base or even some reasonable facsimile as a means of controlling monetary expansion?

As a background for examining this issue, let me summarize the process of implementing monetary policy. The monetary policy of the United States is formulated by the Federal Open Market Committee (FOMC) of the Federal Reserve System and implemented by the Manager of the System Open Market Account. Thus, the monthly instructions by the Federal Open Market Committee to the Manager is where policy decisions can be found and evaluated.

FOMC instructions consist of a general statement of goals and a specific operating directive to the Ac-

		Direc	tive Targets			
		Money Market Conditions Alone	Money Market Conditions and Bank Reserves	Bank Reserves Alone	Bank Credit	Monetary Base
967	Primary	15	0	0	0	0
	Proviso	0	0	0	11	0
968	Primary	17	0	0	0	0
	Proviso	0	0	0	16	0
1969	Primary	14	0	0	0	0
	Proviso	0	0	0	14	0
1970	Primary	5	8	0	0	0
	Proviso	2	0	0	2	0
971	Primary	2	11	0	0	0
	Proviso	3	0	0	0	0

Source: Board of Governors of the Federal Reserve System, Annual Report, 1967-1970 Federal Reserve Bulletin, 1971
Federal Reserve Press Release: "Record of Policy Actions" of FOMC, Feb. 7, 1972

count Manager at the New York Federal Reserve Bank. This operating directive in recent years has generally been divided into specification of a primary target to be achieved, and into a proviso clause which states the conditions under which the primary target is to be modified. It does not state, however, the specific point at which the proviso clause becomes effective. The monetary variables used as primary or proviso targets have usually been expressed as the following: money market conditions, which refer to interest rates, member bank borrowings and the net reserve position; bank credit, that is, the amount of bank loans and investments; and bank reserves and monetary aggregates, which refer to a conglomeration of reserves, money stock and the level of bank credit.

Again, we turn to the record to judge the validity of the ciritics' position. I shall consider actions of the past five years only, a period during which the results of monetarist research received some prominence, and during which it is alleged that monetarist policy prescriptions were tried.

During the years 1967, 1968 and 1969, the Committee met 46 times and issued a primary directive to maintain or change money market conditions 46 times. The proviso clause which modifies these instructions was stated 41 times in terms of bank credit and only once in terms of "money."

Since early 1970, all of the released instructions issued have stated that the goals of monetary policy are to achieve desired growth patterns of money stock, monetary aggregates or bank reserves; but the specific directive of what to use as the operating target by the Account Manager to achieve these goals has never been consistent with monetarist recommendations. Neither some form of the monetary base nor some form of bank reserves has been used as the sole operat-

ing target. In spite of apparent concern with the growth of monetary aggregates, the FOMC continued the use of money market conditions either as a sole target or in conjunction with bank reserves. The monetary base, the target suggested by our research and recommended frequently, at no time appeared as a primary target or in the proviso clause.

If the above evidence is not sufficient to convince you of the nature of the operating strategy of the FOMC over this period of time, let me quote from the analysis of Governor Brimmer:

They (the views of the members of the FOMC) would also probably contain enough common elements relating to operating tactics to add up to a pattern of behavior which can be described as the pursuit of a money market strategy in the conduct of open market operations.<sup>6</sup>

In view of the behavior of the money stock and the record of policy implementation for the past five years, I need only to let you draw your own conclusions as to whether monetarist recommendations were put into effect and whether the current economic situation is due to the following of "monetarist policies."

#### Conclusions

I started this discussion by giving you some examples of criticism of the monetarist view. This criticism has been heeded by many policymakers and by the public in general, and therefore has been reflected in recent stabilization actions. Some of the critics allege to be scientific in their pronouncements, but refuse to apply the scientific criterion for acceptance or denial of monetarist hypotheses. Since the generally accepted criterion is the ability of a theory or hypothesis to predict actual events, I invite you to examine the record of predictions compiled by the St. Louis version of monetarist research and compare it with alternative views. The evidence is overwhelming that the monetarist view cannot be rejected.

The question of whether monetarist policy recommendations have been implemented can be judged on two criteria: one, has the money stock grown at a moderate rate and with the stability prescribed by monetarists, and two, have the policymakers attempted to implement such a prescribed growth rate but failed to succeed because the control mechanism is unreliable? One has only to look at the growth rates of the money stock over the past four years to see that monetarist recommendations were not implemented. It is also amply apparent that the recommended control mechanism for the stabilization of the money stock has not been used. Under these circumstances it is difficult, if not impossible, to suggest that monetarist policy recommendations have been put into effect and have thus produced the current economic predicament.

I am convinced that future stabilization of our economy depends heavily upon a moderate and stable growth of the money stock. But if the pronouncements of critics of the monetarist view are heeded, the result will most likely be erratic fluctuations in the money stock caused by attempts to "fine tune" the economy. Such fluctuations will necessarily cause periods of inflation and will be frequently accompanied by unacceptable levels of unemployment.

If monetarist recommendations are put into effect immediately, we are not going to have an immediate solution to all economic problems currently plaguing us. As I have noted previously, inflationary pressures develop slowly and recede slowly. In 1971 these pressures began to decline, but were accompanied with a high rate of unemployment. If we can have enough patience to allow a moderate and steady growth rate of the money stock, unemployment will gradually decline and we will be assured that future external shocks to the economy will be absorbed with minimum cost. If, on the other hand, we use monetary policy to wipe out slack in the economy in the short run, there could very well be continuous economic fluctuations, and perhaps fluctuations with a consistently larger amplitude.

Thus, this response to the critics is not a defense of a doctrinaire point of view, but a plea to the policymakers and their advisers to re-examine the evidence regarding the validity of the monetarist view. In our economy's present situation, all alternatives must be explored if our citizens are not to run the risk of having to pay a massive economic price in terms of lost output and employment and continued inflation.

<sup>&</sup>lt;sup>6</sup>Andrew F. Brimmer, "The Political Economy of Money: Evolution and Impact of Monetarism in the Federal Reserve System" (Paper presented at the Eighty-fourth Annual Meeting of the American Economic Association, December 27, 1971).