A Monetarist View of Demand Management: The United States Experience

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I AM PLEASED to have this opportunity to present a monetarist view of demand management with special reference to the United States' experience. I will attempt to present what appears to me to be, in my country, a general statement of this view of economic stabilization. My remarks, however, may not be consistent with every aspect of the views held by all of those actively engaged on the monetarist side of the current debate.

This paper first identifies quite generally the major factors which set the monetarist position apart from the prevailing view regarding economic stabilization. Then, there is a summary of the major propositions of this view of demand management. Following this discussion, the United States' experience of the last two decades is analyzed.

The General Monetarist View

In the United States, monetarists have stressed the importance of monetary actions in determining the course of economic activity. Monetary actions include such actions as changes in the discount rate, changes in commercial bank reserve requirements, and open market purchases and sales of Government securities. They also include the Treasury's management of its cash position. These are the basic exogenous variables of monetary management, with the major emphasis given to open-market transactions.

The role assigned to the money stock in the monetarist analysis is not generally understood. The money stock is most frequently used as an indicator of the thrust or influence of monetary actions on the economy. In the United States, there is a close empirical relationship between current and lagged changes in money and changes in nominal GNP. Money is not necessarily considered a causal factor. It is used, instead, as a summary measure of the influence of exogenous monetary variables, primarily those controlled by the Federal Reserve, on aggregate demand. Actions of commercial banks regarding their holdings of excess reserves and actions of households and business firms regarding their holdings of currency, demand deposits, and time deposits are recognized as influencing movements in the money stock. Nevertheless, it is maintained that the usefulness of money as an indicator of central bank monetary influences is not seriously impaired by such actions, because there is considerable empirical evidence that Federal Reserve actions dominate movements in the money stock.

The role assigned to interest rates in this analysis has also been subject to misunderstanding. Contrary to general opinion, interest rates are an important aspect of the monetarist transmission mechanism linking monetary actions to economic activity, but interest rates are no more important than prices of goods and services. In many aspects, this transmission mechanism is close to the Tobin view, except that it takes into consideration many more rates of return and market prices of goods and services. Monetary actions of the Federal Reserve are considered a disturbance which influences the acquisition of financial and real assets. Rates of return on real and financial assets and market prices adjust to create a new equilibrium position of the economy; therefore, these changes are considered the main channels of monetary influence on aggregate demand.

The influence of monetary actions through market interactions is considered to be widely diffused across all of the markets for financial assets, real assets, and services. Consequently, it is contended that the influence of monetary actions on movements in total de-
mand is more important for monetary analysis than their influence on demands of individual sectors. This is contrary to the more conventional view which first considers the response of individual sector demands to monetary actions. Such responses, in turn, are then summed to give aggregate demand. The monetarist position is that the allocative effects of monetary actions have little bearing, if any, on movements in aggregate demand.

A central monetarist proposition is that the economy is basically stable and is not necessarily subject to wide variations in output and employment. In other words, the economy will naturally move along a trend path of output determined by growth in its productive potential. Exogenous events such as wars, droughts, strikes, shifts in expectations, changes in preferences, and changes in foreign demand may cause variations in output around the trend path. Such variations, however, under most circumstances, will be mild and of relatively short duration. This basic stability is brought about by market forces which change rates of return and prices of goods and services in response to these exogenous events. It is admitted that markets are not perfectly competitive and are subject to many rigidities. Such market "imperfections," however, do not greatly impair the stabilizing function of markets; they mainly result in an inefficient allocation of resources. Market imperfections also influence the time pattern of the response of output and prices to monetary actions.

The basic source of short-run economic instability, which will be discussed in more detail later, is monetary actions which result in accelerations and decelerations in the rate of money growth. In the long run, however, the trend rate of monetary expansion does not influence output and employment, but only movements in the price level and other nominal variables.

Monetarist View of Demand Management

The monetarist view of the role of monetary and fiscal actions in demand management makes a clear distinction between the influence of such actions on real and nominal economic magnitudes. It also differentiates between the short-run and the long-run aspects of monetary and fiscal actions.

Monetary Actions

The major impact of monetary actions is believed by monetarists to be on long-run movements in nominal economic variables such as nominal GNP, the general price level, and market interest rates. Long-run movements in real economic variables such as output and employment are considered to be little influenced, if at all, by monetary actions. Trend movements in real variables are essentially determined by growth in such factors as the labor force, natural resources, capital stock, and technology.

In the short run, however, actions of the central bank which change the trend rate of monetary expansion or produce pronounced variations around a given trend rate exert an impact on both real and nominal variables. The timing and the extent to which such real variables as output and employment are affected depends on initial conditions at the time of a change in the rate of monetary expansion. Two major initial conditions are the level of resource utilization and the expected rate of inflation. For example, an acceleration in the rate of monetary expansion at a time of a high level of resource utilization will have little short-run influence on output but a quick influence on the price level. On the other hand, a reduction in the rate of monetary expansion will result in slower growth in real output in the short run, with a faster and larger response if there is a high level of inflationary expectations than if there is a low level.

Fiscal Actions

The monetarist view of fiscal actions is that their main impact is on long-run movements of real output. Government spending and taxing programs can change the rate of growth of potential real output by altering the composition of actual output. An expenditure program which re-allocates resources from current consumption (for example, reduced low income subsidies) to investment (for example, education) will tend to increase the growth rate of potential output. Or, a tax program which encourages private investment will have a similar impact on potential output. Since actual output naturally grows at the same rate as potential output in the long run, these allocative fiscal actions do influence the rate of growth of actual output.

While a faster rate of growth of potential output will tend to reduce the inflationary aspect of a given rate of monetary expansion, this influence is believed to be relatively minor and slow to develop. The reason for this is that the allocative effects of the usual magnitude of such fiscal actions on potential output are not too large and take time to appear.

In the short run, fiscal actions are believed by monetarists to exert some but little lasting influence on nominal GNP expansion and, therefore, have little affect on short-run movements of output and employment. It is argued that Government expenditures
financed by taxes or borrowing from the public tend to crowd out over a fairly short period of time an equal amount of private expenditures, either by interest rate and price changes or by credit rationing. There is some influence exerted over the first part of the adjustment period by a given change in Government expenditures financed in this manner; consequently, an acceleration or deceleration in the rate of Government spending will exert a short-lived influence on total demand. Changes in tax rates, according to some monetarists, can influence economic activity in the short run inasmuch as such changes alter rates of return on capital assets.

Summary of Views on Demand Management

The monetarist position on demand management may be summarized as follows:

1. Demand management is mainly the use of monetary actions to foster an acceptable trend rate of inflation.

2. Short-run instability of output and employment can be greatly reduced if monetary actions are avoided which result in accelerations and decelerations in the rate of money growth.

3. Fiscal actions are not an important aspect of short-run demand management, but the allocative aspect of such actions can be important for such other purposes as promoting economic growth or redistributing wealth.

A Monetarist View of Two Decades of Demand Management in the United States

In analyzing the demand management experience in the United States from the monetarist point of view, the last two decades will be divided into three episodes involving different trend rates of growth of the money stock. The experience of each episode will be presented, and then reasons for the recorded course of money supply growth will be developed.

Demand Management Experience

The last twenty years can be divided into three episodes according to trend rates of monetary expansion—1952 to 1962, when money grew at a 1.7 per cent average annual rate; 1962 to 1966, when the trend rate of monetary growth was accelerated to a 3.7 per cent annual rate; and 1966 to the present, when there was an acceleration to a 6.1 per cent annual rate of growth of the money stock (Chart I).

During the decade ending in 1962, demand management was primarily the Federal Reserve's responsibility. Only one major fiscal action, the income tax cut of 1954, was undertaken for the purpose of influencing aggregate demand. An examination of the published minutes of the Federal Open Market Committee indicates that several monetary actions were taken for the purpose of promoting economic stability. From 1952 to 1962, the United States' money stock increased at a 1.7 per cent average annual rate. There was, however, considerable short-run variability around this trend rate, with periods of fairly rapid increase followed by absolute decrease.

The price level performance, except for a short burst of inflation in 1956 and 1957, was very good, and such performance continued into 1965. The GNP deflator rose at a trend rate of less than 1 per cent from 1952 to 1965. Performance of the real sector of the American economy, however, was far from acceptable as the decade was marked by three recessions. Over this ten year period, the unemployment rate averaged 4.5 per cent. Despite an average unemployment rate of this magnitude, however, real output grew only slightly less rapidly than the 3.5 per cent estimated growth rate of potential output.

The next episode—1962 to 1966—marked the emergence of attempts at "fine tuning" movements in aggregate demand. Fiscal actions became the main tool of such management of the economy, while monetary actions, in the Keynesian tradition, were assigned a purely accommodative role. Little consideration was given to the possibility that monetary actions could exert any independent influence.

Major fiscal actions undertaken during this period for purposes of stimulating aggregate demand were the investment tax credit and accelerated depreciation provisions of the Revenue Act of 1962, the Revenue Act of 1964 which reduced individual and corporate income tax rates, and the Excise Tax Reduction Act of 1965. Then as inflationary pressures began to mount late in the period, the Investment Credit Suspension Act of 1966 was adopted to reduce growth in aggregate demand.

Monetary actions, in their accommodative role, were expansive. The money stock rose at a 3.7 per cent trend rate from mid-1962 to the end of 1966 (Chart I). The rate of monetary expansion was variable over this period. It accelerated to a 6 per cent rate from April 1965 to April 1966, and then money did not grow to the end of 1966.

This episode marked the beginning of accelerating inflation in the United States. The GNP deflator rose at over a 3 per cent annual rate during 1966, com-
pared with a rate less than 2 per cent during the 1952-1962 period.

Many have viewed the movements in output and employment from 1962 to 1966 as very satisfactory. Output rose rapidly, eliminating the gap between potential and actual output which had existed in the early 1960's. As a result, the unemployment rate fell from 5.5 per cent in 1962 to less than 4 per cent in 1966. These developments have been cited as evidence proving the success of the fiscal, "fine-tuning" view of demand management.

The last episode—1966 to the present—is one in which attempts were made to dampen growth in aggregate demand so as to curb an accelerating inflation. An overriding consideration, however, was to accomplish this objective without too great a loss of output and employment. First, fiscal actions were used, and then monetary actions.

The Revenue and Expenditure Control Act of 1968 imposed a temporary 10 per cent surcharge on individual and corporate income taxes and restricted the rate of increase in Federal Government expenditures. Next, the investment tax credit, which had been restored in early 1967, was repealed. Then as output grew more slowly later in the period and the unemployment rate rose, the income tax surcharge was allowed to phase out.

Monetary actions were of a stop-and-go nature similar to fiscal actions. At times during the period, monetary actions were assigned an independent role in demand management in contrast to the purely accommodative role during the 1962-66 episode. In addition, greater emphasis was placed on controlling movements in the money stock. Money grew at a 7 per cent annual rate in 1967 and 1968. Then, steps were taken to curb inflation, and money grew at a markedly lower 3 per cent rate in 1969. But when considerable economic slack appeared, the rate of monetary expansion was accelerated to a 5 per cent rate in 1970 and to a 10 per cent rate thus far in 1971. The over-all trend rate of monetary expansion over the whole four and one-half year period was about 6 per cent, a marked acceleration from the 3.7 per cent rate recorded from 1962 to 1966 (Chart I).

The performance of the American economy since 1966 has been considered highly unsatisfactory. The results of monetary and fiscal actions since 1966 have been a recession accompanied by a high rate of inflation. Inflation accelerated to over a 5 per cent annual rate, and the unemployment rate rose to over 6 per cent.

The experience of the last two decades demonstrates the great lack of success of demand management in the United States. This is particularly evident in the 1960's when very activist stabilization actions were undertaken. Some cite this experience as demonstrating the inability of traditional monetary and fiscal actions to promote economic stability. I do not accept such a view. Instead, I contend that the generally accepted economic foundation of demand management is faulty. Basing stabilization actions on this foundation is a sure formula for failure.

Reasons for Failure of Stabilization Policies

I attribute the very poor record of United States economic stabilization efforts to four main factors. First, and foremost, is a lack of understanding of the independent impact of monetary actions, as measured by changes in the money stock, on the course of economic activity. Second, is the great emphasis given to guiding the course of real variables—output and employment—and the little emphasis, except for short intervals of time, given to controlling inflation. Third, is the great emphasis given to fiscal actions, especially in the 1960's. Fourth, is the use of market interest rates as an indicator of the influence of monetary actions on economic activity.

Role of Monetary Actions Ignored—According to the monetarist view, central bank actions which alter the trend growth rate of the money stock exert an important long-run influence on nominal GNP and the price level. Accelerations and decelerations of the money stock have only an important short-run influence on output and employment. Evidence supporting these two propositions is presented in Charts I and II. *

The money stock panel (Chart I) indicates three trend growth rates of monetary expansion, which were set forth in the preceding section. Money grew at a 1.7 per cent average annual rate from I/1952 to III/1962. Money growth then accelerated to a 3.7 per cent trend rate to IV/1966 and to a 6.1 per cent trend rate to II/1971. Total spending (nominal GNP) and the price level responded to the changes in the trend rate of monetary expansion as postulated by monetarists. Total spending rose at a 4.9 per cent annual rate from I/1952 to I/1963 and then rose at a 7.4 per cent trend rate. The price level (GNP deflator) rose first at a 1.8 per cent rate, then at a 3.8 per cent rate, and since II/1969 at a 5.4 per cent rate. The corporate

*Charts have been updated from those presented at the conference to include data for II/1971.
Aaa bond rate, another nominal magnitude, also moved in a manner similar to changes in the trend growth of money.

Chart II, top panel, presents deviations in the money stock from its trend growth. These deviations are expressed as the ratio of the money stock to its trend value for each quarter. The dashed line at the end of each episode is the ratio calculated on the basis of the previous episode's trend for a few quarters after a change in the trend. This overlap is used to allow for the fact that a change in the trend growth of money is not recognized immediately. The second panel presents the ratio of actual real GNP to potential real GNP. The trend growth of potential real GNP, as indicated on the second panel, has been estimated by the Council of Economic Advisers. The bottom panel presents the unemployment rate.

Regardless of the trend rate of monetary growth (1.7, 3.7, or 6.1 per cent), whenever the ratio of money to its trend value rose (an acceleration in money growth), the ratio of actual real GNP to its potential value rose soon thereafter, and the unemployment rate fell. The opposite happened whenever the rate of money growth decelerated. Despite such short-run developments and despite different trend rates of money growth, the unemployment rate averaged about the same from 1952 to 1962, when money growth was relatively slow, as from 1962 to 1971, when the trend rate of money growth was much greater.

The developments summarized in Chart II are consistent with the monetarist view that accelerations and decelerations of monetary expansion exercise a short-run influence on output and employment, but there is little, if any, long-run influence. These influences were given little consideration in demand management, particularly during the activist period from 1962 to 1968.

**Focus Placed on Output and Employment** — Another factor accounting for the poor stabilization record in the United States is the fact that demand management has been primarily focused on producing desired movements in output and employment. This was true of monetary actions for the 1950's and early 1960's when some independent monetary actions were taken, the period in the mid-1960's of fine tuning using planned fiscal actions and accommodative monetary actions, and the active use of monetary actions after 1968.

If the economy responds to monetary actions, as indicated above, a focus of policy primarily on output and employment can explain the existence of both inflation and high unemployment. In attempting to promote rapid expansion of real output after mid-1962, active use of fiscal actions and accommodating monetary actions resulted in the money stock rising at an accelerated rate until early 1966. Inflation accelerated, and in response, monetary authorities reduced drastically the rate of money growth for two quarters. But then when economic slack appeared in early 1967, money growth was allowed to accelerate to a trend rate greater than the previous one. This sequence of events happened again in 1969 and 1970, producing a still higher rate of money growth. In these latter years, however, monetary actions were on more of a discretionary basis than earlier.

The end result, thus far, of guiding stabilization policy on real variables has been higher and higher trend rates of monetary expansion and greater inflation. Periodically, there have been temporary periods of monetary restraint to curb inflation, which in turn have produced slower output growth and rising unemployment. Such developments, in turn, induce stabilization authorities to initiate a still higher trend rate of money growth, which leads to further inflation. Thus, the American economy may be faced with high rates of inflation without achieving economic stability, unless the main emphasis of policy is shifted to curbing inflation.

**Main Emphasis Given to Fiscal Actions** — A third reason for the poor record of economic stabilization in the United States is the emphasis given to fiscal actions, particularly from 1962 to 1968. Until recently, fiscal actions in the form of Government spending and taxing programs have been given the main emphasis in economic stabilization efforts to the virtual exclusion of monetary actions. Such a development was an outgrowth of conventional economics which for the past 25 years has taught that Federal Reserve actions exercise little independent influence on total demand for goods and services.

According to this widely accepted view, changes in the money stock bring about changes in market interest rates, but total demand is little influenced by interest rate movements. Consequently, monetary actions have been thought to be of little use in any program of economic stabilization. On the other hand, increased Government expenditures are viewed as adding directly to total demand and tax reductions as adding to disposable income which would be used to purchase goods and services. Consequently, this view has argued that fiscal actions have an immediate and powerful influence on total spending. This analysis has received wide acceptance as evidenced in dis-
Chart II

Money Supply: Ratio to Trend
(Ratio in Per Cent)

Ratio of Actual Real GNP to Potential Real GNP
(Ratio in Per Cent)

Unemployment Rate

Legend:
- Solid lines represent the ratio of actual real GNP to potential real GNP.
- Dotted lines represent the ratio of previous trend for the quarterly into the next period.
- Growth trend of Potential Real GNP.
- Growth trend from Q4 '70 to the present.
- Data are seasonally adjusted.
cussions of economic stabilization by the general public, in the press, in the Congress, and in the Reports of the Council of Economic Advisers from 1962 to 1969.

It is my belief that the accelerating inflation of the last half of the 1960's can be attributed, in large part, to the great emphasis given to fiscal actions and the downgrading of monetary influence. Monetary authorities did not reduce the rapid rate of monetary expansion during a large part of that period because there was a desire to let fiscal actions curb inflation and a belief by some that only fiscal actions would be effective. Then, when restrictive fiscal actions were taken in mid-1968—the surtax and slower increases in Government spending—many economists, on the basis of conventional wisdom, predicted "fiscal over-kill" by early 1969. In response to such predictions, monetary authorities continued even more expansionary actions.

Faulty Method of Monetary Management Used –
A fourth reason for the poor stabilization record of the last 20 years has been due to the fact that the usual method of carrying out United States monetary policy in the 1950's and 1960's was faulty. Discretionary monetary policy was reinstated in 1951 after its suspension during World War II and up through the early part of the Korean War. The purpose of the 1951 change was to permit monetary authorities to fight the inflation of the Korean War. In conducting its monetary policy responsibilities since then, the Federal Open Market Committee has relied almost exclusively, until just recently, on measures of money market conditions as a guide to its operations. I am sure that most of you are familiar with the view that falling interest rates indicate expansionary monetary actions, while restrictive actions are indicated by rising interest rates.

Such a view was in general agreement with the conventional wisdom, which holds that monetary actions work primarily through changes in market interest rates. It also was in agreement with the view that the Federal Reserve has great ability to "set" market interest rates. Recent research and experience, however, have tended to reject these propositions. For example, it has been demonstrated that rapid monetary expansion, such as in 1967 and 1968, stimulates total spending, fosters inflation, and thereby generates rapidly growing demand for credit and rising interest rates, not lower rates.

By using market interest rates to indicate the thrust of its actions in the 1950's, the Federal Open Market Committee frequently resisted the pace at which rates fell during recessions and rose during recoveries. Such actions did not alter the trend growth of money or inflation, but they produced accelerations and decelerations which led to economic instability.

Then in the fine tuning of the 1960's, the Committee concluded that, despite very rapid monetary growth, rising interest rates indicated considerable monetary restraint during 1967 and 1968. Consequently, it was believed by many that further steps need not be taken to reduce the excessive rate of monetary growth. In retrospect, it is now apparent that the traditional reliance on such measures of money market conditions as market interest rates contributed to our present inflation and to instability in the real sector.

The focus on market interest rates in conducting monetary management during the last half of the 1960's also led to higher trend rates of monetary expansion in two other ways. Constraints on interest movements imposed by public opinion and the Congress on Federal Reserve actions caused, in part, the very expansionary monetary actions during 1967 and 1968. Following the rapid rise in market interest rates during the credit crunch of 1966, there was a belief that the extent of the increase was too great because of the dislocations which had occurred in the savings and housing industries. In order to forestall further dislocations, there was a desire to hold back the magnitude of interest rate increases; this led to passage of the Interest Rate Control Act of 1966. Presently there is a reluctance to allow rates to rise for fear of "choking-off" the economic recovery. Attempts to hold back interest rate increases at a time of expanding economic activity require great injections of bank reserves which contribute to a rapid growth in the money stock. This, in turn, fosters excessive total demand and feeds further the fires of inflation.

The focus on market interest rates also helped to bring about the extremely high rates of monetary growth during 1967 and 1968 as a result of the decision to finance the expansion of the Vietnam War and rapidly rising welfare programs by borrowing rather than exclusively by taxes. During 1967 and 1968, large Government financings in the security markets caused the Federal Reserve, because of an even-keel policy of stabilizing money markets at times of Government borrowing, to buy large quantities of Government securities. As mentioned earlier, there was great upward pressure on market interest rates from the private sector. Hence, with large demands for funds from
both private sources and the Government, large inceptions of member bank reserves were required for even-keeling by the Federal Reserve. These inceptions helped to foster rapid growth in the money stock.

**Conclusions**

Now to answer the question posed for this conference, "Demand Management, Illusion or Reality?" According to the monetarist view, the answer is "reality," but the essence of such reality is markedly different than that of the more conventional, activist view of demand management. Monetary actions should be directed primarily at fostering an acceptable rate of inflation; this requires the following of an appropriate trend rate of monetary expansion. With regard to output and employment, monetary actions should be conducted so as not to be a source of economic instability; this requires the avoidance of periods of marked accelerations and decelerations in the rate of money growth. Thus, I believe that there are strong economic reasons for the monetary growth rule and little room for discretionary, short-run monetary management.

The recent American experience demonstrates the potential of short-run monetary actions to produce both inflation and economic instability. For instance, the 6 per cent trend growth of money since 1966, given the 1.5 per cent trend increase in velocity that has occurred since then, is consistent with a 7 to 8 per cent annual rate of increase in nominal GNP. If potential real output should continue to rise at its recent 4.3 per cent annual rate, this rate of money growth implies a trend rate of inflation between 3 and 4 per cent. If velocity, however, should resume its higher 3.5 per cent average annual rate of increase recorded from 1952 to 1966, the recent trend rate of money growth implies a 5 to 6 per cent rate of inflation. The monetary restraint of 1969, when money rose at only a 3 per cent rate, produced the recent recession in the United States, but since this was only a relatively short-lived deceleration in money growth, the rate of inflation was little influenced.

Stabilization actions since 1966 have not been conducive to a marked reduction in the rate of inflation. The United States inflation will not be reduced substantially until a lower trend rate of money growth is established; a 3 to 4 per cent rate probably would be optimal. Since the present high rate of inflation has been in existence for several years, however, expectations are for a continued high rate of price advance. In such a case, a move to less expansionary monetary actions will result in considerable adjustment costs in terms of slower expansion in output and employment. Such costs cannot be avoided if the United States inflation is ever to be contained, and attempts to avoid them will probably lead to higher rates of inflation.

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