A MONETARIST'S VIEW OF THE U. S. ECONOMY

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I am most appreciative to our hosts for inviting me here to share with you my thoughts on the probable course of the United States economy over the next year or so - particularly with regard to the prospects of successfully curbing inflation in the near future without a serious downturn in output and employment. My remarks on these matters reflect the views of my colleagues and myself based on recent investigations we have been conducting at the Federal Reserve Bank of St. Louis.

Our staff has conducted several studies into the response of the economy to monetary and fiscal actions. Although the primary focus and interest of this work is, quite naturally, with respect to the United States economy, I believe the conclusions reached that monetary actions have exerted a much greater influence on the economy than have fiscal actions are sufficiently general in character to be worthy of considering for other countries. In that context, I will refer later to the results of research we have been doing on these questions for

countries other than the United States. I think you will be surprised at the degree of uniformity which exists among countries in the response of economic activity to monetary and fiscal actions.

Before proceeding, let me make my position clear regarding the form of analysis I will present. As a participant in the meetings of the Federal Open Market Committee which formulates national monetary policy, it is not appropriate for me to present to you what might be considered an exact forecast. To do so, would require a precise assessment of the current stance of monetary policy and a forecast of its most probable course over the next several months. Instead, I will limit my remarks to our approach to economic forecasting and then present some forecasts which are based on alternative assumptions of the future course of monetary policy.

Our approach to these matters has been labeled by some the "Monetarist view" inasmuch as we emphasize monetary policy, and more specifically, changes in the money stock as the most important guide for implementing national economic stabilization policy. Moreover, our theoretical foundation is that of the modern quantity theory of money. Increases in the money stock relative to the demand for money balances induces changes in the rate of spending on goods and services and on financial assets.

In contrast, most economic forecasters appear to work within the Keynesian income-expenditure framework. According to this view, income generates expenditures on goods and services, and these outlays, in turn, generate income receipts. This approach stresses fiscal actions, that is, Federal government spending and taxing programs, and other so-called autonomous forces as the major factors which determine the course of production and employment. Before attempting to evaluate present prospects for inflation and for recession, I will contrast in some detail our view of what is important in assessing forthcoming developments in spending, output, and prices with our understanding of the views of the main body of forecasters.

The monetarist view holds that changes in the nation's money stock, customarily defined as the general public's holdings of demand deposits and currency, are the major determinant of total spending. Total spending is measured by the gross national product at current prices. This view of how total spending is determined, unlike the Keynesian approach, de-emphasizes the influence of so-called autonomous changes in the components of over-all spending such as outlays for new plants, houses, or Federal government expenditures. For example, according to our view, a sudden burst of business optimism which results in added spending for new plant and equipment at a time when there is no change in the money stock, operating through the market mechanism, tends to crowd-out an approximately equal amount of spending by other parts of the economy.

Changes in the price level, according to our view, are determined mainly by changes in total spending relative to the economy's ability to expand real output of goods and services. When total spending increases greatly relative to the nation's productive capabilities, as it did in 1968, output increases only insofar as additional resources come into existence, and prices rise rapidly. This is a demand theory of inflation. Past price movements, including wages, may also affect current prices, but such an influence is considered to reflect past demand pressures, and we believe the more popular label, "cost-push", to be misleading. Since changes in the money stock are considered to have a great influence on total spending, this view is a monetary theory of inflation.

The position I have just outlined carries several implications for economic stabilization actions. First, we believe that the economy is basically stable; that is, there are no fundamental tendencies for economic conditions to alternate between major recessions and inflations. Second, there is persuasive evidence that movements in the money stock have been the major source of instability in the past. Therefore, we believe that monetary expansion must be controlled in such a manner as not to cause instability.

Finally, we believe that Federal government spending and taxing actions have been over-emphasized in explaining

past economic fluctuations and in planned economic stabilization programs. The influence of these actions, according to the monetarist position, depends on the method of financing a deficit or disposing of a surplus. For example, without money expansion the impact on total spending of an increase in government expenditures is little different than the impact of an increase in outlays on plant and equipment by business firms or an increase in expenditures for color TV sets by consumers. Increased government spending, in the absence of accommodative monetary expansion, must be financed by taxes or borrowing from the public, and as a result, the market mechanism operates to reallocate funds and resources and there will be a corresponding crowding-out of private spending.

I do not want to leave with you the implication that fiscal actions have absolutely no influence on the economy. Changes in the size of a deficit or surplus not accompanied by accommodative monetary actions exert an important influence on market interest rates. In such an event, government expenditures result in a reallocation of resources from private to public use, and as a result, long-term growth may be affected. For example, expansion of welfare programs or consumer orientated services at the expense of investment in new capital goods could tend to lower long-run growth of the economy. Whether such a development is desirable is a

matter of national priorities.

The size of the budget deficit or surplus may also influence total spending indirectly in the more immediate period. The general experience in the United States, as well as in other countries, has been that central banks have found it necessary to help finance large government deficits by expanding the money stock. As a result, total spending increases. Our research indicates that in the past such a response of the Federal Reserve System to large government deficits has been a major influence on the rate of monetary expansion in the United States. This was an important factor bringing about our present inflationary situation.

Let us now focus our attention on the Keynesian income-expenditure view of the economy and how this view is incorporated in forecasting procedures. Most of the large-scale forecasting models such as the Wharton School, the University of Michigan, and the United States Commerce Department models have been developed on income-expenditure principles. The large-scale econometric model of the American economy developed jointly by the Federal Reserve Board and M. I.T. also incorporporates the income-expenditure framework. Most present day forecasters in business and finance usually use this approach to analyze economic developments and to predict the course of economic activity.

The income-expenditure approach to forecasting, in contrast with the monetarist position, places little emphasis on the determination of the dollar volume of total spending as represented by nominal GNP. Instead, it generally focuses directly on determinants of real demand for output, and somewhat independently, on the determinants of the price level. Money GNP is considered merely an interesting but not a too important by-product in most forecasts.

According to the income-expenditure approach, total real output, measured by GNP adjusted for price level changes, consists of individual sector acquisitions of goods and services. Consequently, forecasters using this approach concentrate on forecasting acquisitions of goods and services by households, businesses, and government units. These projected acquisitions are, in turn, added together to produce an estimate of real output, commonly referred to as real GNP.

This approach holds that changes in the rate of acquisition of goods and services by the various economic sectors are initiated mainly by autonomous forces other than changes in the money stock. Frequently, changes in these autonomous sources of demand are measured by surveys of consumer buying intentions, anticipations of spending on plant and equipment by business firms, and stock market

sentiment. Other important autonomous forces, according to the income-expenditure view, are government spending and taxing programs. An increase in government expenditures is considered a direct addition to total demand for real product. A change in tax rates changes disposable income, which, in turn, exercises a direct influence on total real product.

This view, in its usual application to forecasting, does not take into consideration the possibility that there are important interrelations among real and financial markets. An expansion in the rate of purchasing goods and services by one sector may be offset by a like reduction in the purchases of another sector. For instance, an increase in household demand for durable goods may be offset by a decline in business acquisitions of plant and equipment, or housing construction. One frequently hears the statement today that if business purchases were to decline, total output would also decline, thereby reducing inflationary pressures. But, in fact, if business purchases decline, purchases of goods and services by another part of the economy may take up the slack, resulting in little net effect on the rate of inflation.

Price level changes are held by the income-expenditure approach to be causes rather than results of changes in total spending. Cost-push, wage markups, the

umemployment rate, and monopoly power are considered the main causes of changes in the price level. An example of this view is provided in a paper explaining the main characteristics of the FRB-MIT econometric model presented at the 1967 annual meeting of the American Economic Association. I quote:

> "....the actual specification of the model reflects the judgment that there have been few if any periods of demand inflation ... in the United States since the Korean War.
>
> "The basic hypothesis on price formation during the 1953-65 period considers 'desired' prices as a markup of unit labor costs and costs of raw material inputs, with the markup itself a function of the rate of capacity utilization."

This view I have just cited frequently leads to the conclusion that monetary actions have little direct bearing on price level changes.

With regard to economic stabilization, the income-expenditure approach views the economy as highly unstable, with frequent shifts in the autonomous forces causing alternating periods of recession and inflation. It is held that activist government policies are necessary to avoid these undesirable events. Monetary actions are considered to be relatively impotent, while fiscal actions are considered

a powerful tool for stabilizing the economy. This view, however, pays little attention to the importance of how a deficit is financed - either by borrowing from the public or through monetary expansion.

I believe it is worthwhile to examine briefly the general record of forecasting in recent years. To the extent that there is criticism implied in my remarks, I want to emphasize that it is directed toward the model builders following the Keynesian approach and not necessarily toward the Keynesian theory itself.

Forecasting the course of the American economy has proven to be a frustrating undertaking in the inflationary environment of the past five years. Most forecasts for 1967 did not indicate the mini-recession of the first half of that year.

Many forecasts for late 1968 and 1969 greatly underestimated the continued strength of total spending on goods and services and the accelerating inflation. These forecasts were based on the assumption the fiscal package of mid-1968 would have an immediate and significant effect on total spending. Moreover, the usual forecast for 1969 was that real output growth would slow during the first two quarters and be followed by a resumption of rather strong expansion in the last half of the year.

With the benefit of hindsight, we now observe that the actual pattern of real output growth was opposite the one generally projected by income-expenditure models. Output continued to grow at a moderate rate to mid-1969, but then slowed and virtually ceased by the end of the year.

These errors in forecasting I attribute, in the main, to a prevalent failure to give adequate recognition to the influence on economic activity of monetary actions, as measured by changes in the money stock. The mini-recession of 1967 was preceded by no growth in money during the last eight months of 1966. Continued rapid growth in total spending, following the imposition of the income surtax in 1968, occurred against a background of very rapid expansion in the money stock. These are not isolated cases. Our studies of the United States economy since 1919, and of the post-World War II experience in major European countries, Japan, and Canada support the proposition that changes in the money stock have been the major cause of business cycle movements.

In last month's issue of our St. Louis monthly Review we published the results of research on the influence of monetary and fiscal actions in eight countries other than the United States. In all eight of those countries it is shown that

monetary actions, measured by changes in the money stock, played a key role in the business cycle. As a matter of fact, in Belgium, France, Germany, Italy, and Japan monetary influences have affected total spending more quickly than in the United States. In Canada, the Netherlands, and the United Kingdom the influence of monetary actions have taken somewhat longer to affect total spending than in the United States.

On the other hand, fiscal influences, where we were able to measure them in the case of Canada, Germany, and Japan, were found to be of relatively minor significance. The results with respect to the relative importance of monetary and fiscal actions which were found for the United States are also substantially the same for these three countries.

This should not be surprising. After all, economies which are basically similar with respect to being market-oriented and operating primarily through decentralized decision-making, could be expected to respond in substantially similar ways to the monetary and fiscal actions of the government.

I turn now to the current economic outlook for the United States. First, I will outline our view regarding the response of total spending, real output, and price movements to monetary restraint. Then, I will discuss the events of last

year as they are expected to influence the outlook. Finally, I will present our outlook for the next several quarters under alternative rates of growth in the money stock.

At the Federal Reserve Bank of St. Louis, our staff is conducting further investigation into the response in the United States of total spending, real output, and the price level to changes in the rate of monetary expansion. The findings of this research will appear in a forthcoming issue of our Review. Results thus far indicate that a marked change in the growth rate of money is followed about two quarters later by a noticeable change in nominal GNP growth in the same direction. When total spending growth finally slows in response to reduced monetary expansion, growth of output of goods and services slows simultaneously, while at least an additional three quarters are generally required for a marked reduction in the rate of inflation. We estimate that the entire process of curbing inflation normally requires about three years. The process of fully curbing inflation is delayed still longer following a period of prolonged and accelerating price advances.

Our research further indicates that economic conditions prior to a change in monetary actions have an important bearing on the responses of output and the price

level to a change in the rate of growth of the money stock. Among such conditions are the level of resource utilization and the rate of increase in prices in the immediate past. In our opinion, the frequently observed variable lag in the economy's response to a marked change in the rate of monetary expansion can be attributed in considerable measure to varying economic circumstances prior to the monetary change. We believe we now have some knowledge of the forces shaping the lag in the response of total spending, real output, and the price level to monetary restraint, and this knowledge is incorporated into our present outlook.

Before moving to our projections for the United States, a few comments on our current situation are necessary. First, there has been substantial monetary restraint only since early last summer when the money stock ceased to expand. Second, total spending, or GNP, rose at a much reduced rate from the third to the fourth quarter of 1969. Next, growth in real output has apparently come to a halt. Evidence of recent cessation in real product growth is provided by an apparent slight decrease in real GNP for the fourth quarter of last year and a six per cent annual rate of decrease in the industrial production index since mid-1969. Finally, despite cessation of real growth in the economy, there has been little, if any, abatement in the rate of inflation. Our research

indicates that the accelerating inflation of the past four years will continue to exert great upward pressure on the price level for some time.

These economic developments of late last year conform quite closely to the pattern to be expected on the basis of our recent research. A marked reduction in the rate of monetary expansion has been followed, with a short lag, by slower growth in total spending and real output. Although the rate of increase in the price level has been little changed, I am confident that an effective basis has been laid for an ultimate deceleration of price increases.

Let us now examine the implications for the near future which, according to our model, follow from three alternative rates of growth in the money stock from last December to December 1970. The first assumed growth rate of money is zero per cent, the same as in the credit crunch period of 1966 and the rate which prevailed during the last seven months of 1969. The second assumed rate of monetary expansion is three per cent, a moderate rate by historical comparison and about the rate from 1961 to 1964 when the economy was in the noninflationary recovery period from the last recession. The final alternative rate of growth in money considered is six per cent. This approaches the excessive rate of 1967 and 1968. With each of these three alternative rates

of monetary expansion, Federal government expenditures are assumed to increase at a six per cent rate during this year.

If the money stock is held constant throughout 1970, a very restrictive monetary policy, there would be a substantial recession, of at least the magnitude of the one we had in 1960-61. Real output would decrease at about a three per cent annual rate during the year and the unemployment rate would rise to around six per cent by the year's end. Moderate progress would be made in the fight against inflation; overall prices would be rising at an annual rate about a percentage point less than in the first three quarters of 1969.

A three per cent rate of increase in money would result in a mild recession with about a one per cent rate of decrease in real output during the year. At the end of 1970 the unemployment rate would be above 5 per cent. The price level would be rising only a little more slowly than in recent quarters, but the stage would be set for substantial price improvement in 1971 and 1972.

Finally, with a rapid six per cent rate of monetary expansion the economy would nevertheless border on a recession early this year due to the substantial monetary restraint we had in the last half of 1969. Real product growth would jump to a 3 per cent rate by the end of the year

but no significant headway would be made in our fight against inflation.

It should be clear from my remarks that I favor an intermediate position, that is, a rate of monetary expansion in the neighborhood of 3 per cent. A 3 per cent rate is, in my opinion, optimal among the set of alternatives here examined. Although somewhat longer time would be required to reduce the rate of inflation significantly, there would be only a relatively short period of economic slowdown. Real output would begin to increase once again by the end of this year.

In conclusion, my outlook for 1970 does not present a very optimistic view of short-run prospects for curbing inflation. As a result of the economic heritage of 1964-68, moderation of upward price trends will be slow. Despite slower growth in real output, recent accelerations in prices have provided added momentum to further price movements, thereby making it more difficult to reduce the rate of inflation significantly this year. It is our estimate that more than two years will be required to reduce the rate of price increase to below its trend rate of 2.3 per cent over the last twenty years.

A recession has been defined by some analysts as two successive quarters of zero or negative growth in real product. On the basis of that definition we are unlikely to

avoid a recession this year. Moreover, an attempt to avoid a recession completely by shifting to a rapid rate of monetary expansion would mean the fight against inflation would be lost.

When total spending and prices are permitted to get so far out of hand as they were during 1965-68 in the United States, it is a long slow road to price stabilization. The longer inflation has gone on the longer the time from inauguration of moderate monetary restraint to adequate restriction on price rises and to decline of interest rates. This was one of the lessons from the United States' experience after the Korean inflation. But while that period benefited from necessary monetary restraint, it also suffered from erratic monetary actions; the money stock growth alternated between periods of rapid increases and declines. We may hope that this time we can avoid extremes and benefit from moderate steady restraint.