TODAY I WOULD LIKE TO TALK ABOUT THE PROSPECTS FOR THE U.S. ECONOMY. MOST IMPORTANT IN MAKING SUCH AN ASSESSMENT, IN MY OPINION, IS THE FUTURE COURSE OF MONETARY AND FISCAL POLICY. TO MAKE SURE WE UNDERSTAND EACH OTHER, LET ME BRIEFLY EXPLAIN WHAT WE MEAN BY MONETARY POLICY AND WHAT WE MEAN BY FISCAL POLICY. BY MONETARY POLICY WE MEAN FEDERAL RESERVE ACTIONS IN THE FORM OF BUYING AND SELLING GOVERNMENT SECURITIES IN THE OPEN MARKET TO INFLUENCE THE AMOUNT OF MONEY IN THIS COUNTRY. MONEY IS DEFINED AS THE AMOUNT OF DEMAND DEPOSITS AND CURRENCY HELD BY THE NONBANK PUBLIC. DECISIONS ABOUT MONETARY POLICY REST PRIMARILY WITH THE FEDERAL OPEN MARKET COMMITTEE CONSISTING OF THE SEVEN MEMBERS OF THE BOARD OF GOVERNORS AND FIVE FEDERAL RESERVE BANK PRESIDENTS. BY FISCAL POLICY, ON THE OTHER HAND, WE MEAN FEDERAL GOVERNMENT ACTIONS TO SPEND FUNDS AND CHANGE TAX RATES. THESE DECISIONS, OF COURSE, REST WITH CONGRESS AND THE EXECUTIVE BRANCH OF OUR GOVERNMENT.
In recent years there has been increasing recognition of the importance of monetary policy in achieving the basic stabilization goals of steady growth, price stability, and full employment. Perhaps the main reason for this recognition has been the recent failure of fiscal actions to forecast economic developments. On the other hand, economists who consider monetary influences to be important have had more success.

In order to understand the monetary approach, I shall first describe briefly the view of the economic process in a Keynesian framework. This is the framework popularized by the economic advisers of Presidents Kennedy and Johnson. Second, I will contrast the Keynesian framework with what we call the monetarist framework. Third, I will review the record of these two approaches in explaining economic events in the United States and other industrial nations. And, finally, I shall present a monetarist outlook for the United States for the coming year.
The Keynesian View of the Economic Process

Most of the large-scale economic forecasting models are based on a Keynesian income-expenditure framework. Most present-day economic forecasters usually use this approach to analyze economic developments and to predict the course of economic activity. The research strategy underlying this approach focuses on an analysis of the determinants of real output, using a consumption function for household demand and an investment function for business demand. Typically these spending functions are broken down into a large number of subsectors. The individual estimates are added together to produce an estimate of total real output, that is, real GNP.

This Keynesian approach considers the major determinants of changes in real output to be in various outside forces other than changes in the money stock. Among the measures of outside sources of demand are surveys of consumer buying intentions, anticipations of spending on plant and equipment, and, occasionally, stock market behavior. The forces which are emphasized in this income-expenditure framework, because they can be controlled by policymakers, are Federal Government spending and tax rates. An increase
IN GOVERNMENT SPENDING IS THOUGHT TO LEAD TO MULTIPLE INCREASES IN THE TOTAL DEMAND FOR REAL PRODUCT. A CHANGE IN TAX RATES AFFECTS DISPOSABLE INCOME, WHICH, IN TURN, EXERCISES A DIRECT INFLUENCE ON THE DEMAND FOR REAL PRODUCT.

Price level changes in this framework are a cause rather than a result of changes in total spending. Cost-push, wage markup, labor and business monopoly power are considered to be the outside causes of changes in the price level.

This view that real product is determined by one set of outside factors and that the price level is determined by another set of factors such as monopoly power, leads naturally to the conclusion that monetary actions have little direct bearing on the level of total demand, real GNP, or prices.

With regard to economic stabilization, this income-expenditure approach views the economy as basically unstable, with frequent shifts in outside forces causing alternating periods of recession and inflation. An activist countercyclical Government policy is necessary to avoid these undesirable events. Fiscal policy actions with respect
Federal Government spending and tax rates are considered the most powerful tool for stabilizing the economy.

**The Monetarist’s View of the Economic Process**

The monetarist view is that the money stock, that is, the amount of demand deposits and currency, or some closely allied financial aggregate, is the major determinant of total spending, that is, nominal GNP. This view, unlike the Keynesian approach, deemphasizes the influence of nonmonetary outside factors in explaining total demand. For example, the monetarist’s position would hold that a sudden increase in new plant and equipment spending by business would tend to raise interest rates and “crowd out” an approximately equal amount of spending in other parts of the economy, if the money stock did not change.

The process by which monetary influences are believed to affect the rest of the economy is of the following general form. Households and businesses desire an amount of money which is determined primarily by their wealth, income, and the level of interest rates. When the Federal Reserve increases the money stock this creates an imbalance between the amount of money people want to hold, and the amount they actually hold. This excess stock of
MONEY ASSETS IN THE PORTFOLIO OF HOUSEHOLDS AND BUSINESSES INDUCES THESE DECISION-MAKING UNITS TO READJUST THEIR PORTFOLIO BY EXCHANGING EXCESS MONEY BALANCES FOR REAL GOODS AND FINANCIAL ASSETS. THE PROCESS HAS A DIRECT EFFECT OF INCREASING THE DEMAND FOR GOODS AND SERVICES AND FOR FINANCIAL ASSETS, TEMPORARILY DECREASING INTEREST RATES. THE DECLINE IN INTEREST RATES INDUCES FURTHER INCREASES IN INTEREST-SENSITIVE PORTIONS OF CONSUMPTION AND INVESTMENT SPENDING. THUS, MONETARY ACTIONS WHICH CHANGE THE MONEY STOCK AFFECT TOTAL SPENDING BOTH DIRECTLY THROUGH GOODS AND SERVICES MARKETS AND INDIRECTLY THROUGH THE FINANCIAL ASSET MARKETS.

CHANGES IN THE PRICE LEVEL, ACCORDING TO THE MONETARIST VIEW, DEPEND MAINLY ON CHANGES IN TOTAL SPENDING RELATIVE TO THE ECONOMY’S ABILITY TO EXPAND REAL OUTPUT. WHEN TOTAL SPENDING EXCEEDS THE NATION’S PRODUCTIVE CAPABILITY, AS IN 1968 AND 1969, REAL OUTPUT RISES ONLY IN LINE WITH THE GROWTH AND PRODUCTIVITY OF RESOURCES, AND PRICE RISES MAKE UP THE DIFFERENCE. IN CONTRAST TO THE KEYNESIAN INCOME-EXPENDITURE APPROACH, THIS IS A DEMAND THEORY OF INFLATION RATHER THAN A SUPPLY THEORY. PAST PRICE MOVEMENTS, INCLUDING WAGES, ALSO AFFECT CURRENT PRICES. HOWEVER, TO CALL THIS PHENOMENON "COST-PUSH" IS MISLEADING, SINCE IT IS DUE TO PAST MONETARY INFLUENCES ON TOTAL DEMAND.
Basic Differences Between Keynesian 
And Monetarist Positions

The two positions outlined above carry different implications for economic stabilization actions. First, as noted earlier, the Keynesian position is that the economy is basically unstable, alternating between recessions and inflation because of unpredictable shifts in outside influences on the economy. The monetarist's position is that the economy is basically stable.

Second, the Keynesian approach emphasizes an activist government policy as necessary to offset the basic instability in the private sector of the economy. The monetarist's position is that movements in the money stock have been a major source of past instability in the economy and that once this variable is brought under control, future economic fluctuations will be far less severe.

Finally, the Keynesian position holds that Federal Government spending and tax actions are the major stabilization tools. The monetarist position is that changes in the money stock are the dominant stabilization instrument. Monetarists consider that the method of financing government spending plays a key role in determining the influence that
FISCAL ACTIONS HAVE ON THE ECONOMY. WITHOUT PARALLEL INCREASES IN THE MONEY STOCK, AN INCREASE IN GOVERNMENT SPENDING MUST BE FINANCED EITHER BY INCREASED TAXES OR INCREASED SALE OF GOVERNMENT DEBT TO THE PUBLIC. TAX FINANCING REDUCES DISPOSABLE INCOME, WHILE DEBT FINANCING INCREASES INTEREST RATES. IN EITHER CASE, THERE TENDS TO BE A "CROWDING OUT" OF PRIVATE SPENDING. THUS, AN INCREASE IN GOVERNMENT SPENDING HAS LITTLE IMPACT ON TOTAL SPENDING OVER THE BUSINESS CYCLE.

ON THE OTHER HAND, IF GOVERNMENT SPENDING IS ACCOMPANIED BY AN INCREASE IN THE MONEY STOCK THERE CAN BE A SUBSTANTIAL EFFECT ON TOTAL SPENDING BECAUSE THE PRIVATE SECTOR IS NOT "CROWDED OUT" OF THE MARKETPLACE BY EITHER AN INCREASE IN TAX RATES OR AN INCREASE IN INTEREST RATES. I CONSIDER SUCH A PHENOMENON TO BE MORE APPROPRIATELY CALLED A MONETARY ACTION RATHER THAN A FISCAL ACTION.

I DO NOT WANT TO LEAVE THE IMPRESSION THAT GOVERNMENT SPENDING HAS NO INFLUENCE ON THE ECONOMY. IT CAN AFFECT THE DISTRIBUTION OF RESOURCES BETWEEN PRIVATE AND PUBLIC USE. AS A CONSEQUENCE, IT CAN AFFECT THE ECONOMY'S LONG-TERM GROWTH RATE. GOVERNMENT SPENDING CAN ALSO INFLUENCE THE DISTRIBUTION OF INCOME AMONG ECONOMIC CLASSES. WHETHER SUCH DEVELOPMENTS ARE DESIRABLE IS, OF COURSE,
A MATTER OF NATIONAL PRIORITIES WHICH SHOULD BE CONSIDERED QUITE INDEPENDENTLY OF STABILIZATION POLICY.

The ultimate test of which approach to economic stabilization is more useful rests on the relative ability of each to explain a wide body of economic behavior. Economists of the Federal Reserve Bank of St. Louis have for some time been conducting empirical tests with respect to these issues. I will not repeat the results of these research efforts here because the details are available from our bank. What I will do is to note the general nature of the results obtained.

An examination of United States economic history back to 1919 and also the postwar experience of seven major industrial foreign countries, revealed that in every country studied, and in every period of recent American history (except in World War II), monetary influences as measured by changes in the money stock, have preceded every major economic recession and inflation. This implies that a great deal of the economic instability in the United States and elsewhere has been due to the fact that the policy authorities have allowed the money stock to follow a procyclical pattern.
In addition, in every country for which data were available, fiscal influences were found to be less predictable and weaker in their impact on economic activity than monetary influences. These two major findings of our research strongly support the monetarist’s approach to economic stabilization.

Another way of discriminating between the two approaches is to look at the general record of forecasting in recent years. Most forecasts for the United States, based on Keynesian income-expenditure assumptions for late 1968 and 1969, greatly underestimated the continued growth of total spending and rise in prices. These forecasts were based on the assumption that the fiscal package of tax increases and spending reductions of mid-1968 would have an immediate and significant restraining effect on total spending. Moreover, the standard forecast for 1969 was that real output growth would be slow during the first half and rather strong in the second half of the year.

With the benefit of hindsight, we now observe that the actual pattern of real output growth in 1969 was just the opposite of that projected by the Keynesian income-expenditure models. These errors in forecasting I attribute in the main to the failure of the model-builders to give adequate recognition to the influence of monetary actions on economic activity.
Monetarists' forecasts for this 1968-69 period, based upon movements in the money stock, were much more accurate. Equally impressive, but less well-publicized, monetarists' forecasts of a mini-recession in the first half of 1967 were also more accurate than the Keynesian forecasts for that period. These are not isolated cases. Our studies indicate that forecasts of the United States economy since 1919 and in postwar Western Europe, Canada, and Japan, would have been more accurate based on monetary developments than on fiscal developments.

A Monetarist's Projection for the Coming Year

The following projections are based on research by the St. Louis Federal Reserve Bank on the economic process (see the April 1970 issue of our Review). In general, our results indicate that a marked change in the growth rate of money is followed about two quarters later by a change in the growth of nominal GNP. This leads simultaneously to a temporary change in the growth of real output, while it takes at least an additional three quarters to effect a change in prices. We estimate that the process of curbing inflation of the duration and magnitude now apparent in the United States, without following policies that would lead to a severe recession, requires about three years. This correction process would take even longer if the inflation were longer or more rapid than that we have had.
There was some monetary restraint in the first half of 1969, with money growth reduced from 6 per cent to 4 per cent, and more restraint in the second half, with no money growth. This was eased slightly in the first quarter of 1970, and apparently somewhat further in the second quarter. The restraint of 1969 led to a much reduced rate of growth in total spending in the fourth quarter of 1969 and the first quarter of 1970. Most of this slowing of growth has shown up in a decline in the real output, while prices have continued to rise at about the same inflationary rate as in 1969.

We have projected developments for the remainder of 1970 and to mid-1971 on the basis of three alternative rates of growth in the money stock from the second quarter of 1970 through mid-1971: no change, a 3 per cent rate, and a 6 per cent rate. In each case Federal Government expenditures are assumed to increase at the rate projected in the fiscal 1971 budget, adjusted for the recent Federal pay increase.

If the money stock is held constant through mid-1971, a very restrictive monetary policy, there would most likely be a substantial recession of at least the magnitude of the one we had in 1960-61, and probably more like the one we had in 1957-58. Real output would still be decreasing in mid-1971,
AND UNEMPLOYMENT WOULD BE ABOUT 7 PER CENT OF THE LABOR
FORCE. SUBSTANTIAL PROGRESS WOULD BE MADE IN THE FIGHT
AGAINST INFLATION; OVERALL PRICES WOULD BE RISING AT AN
ANNUAL RATE OF 2 TO 3 PER CENT BY MID-1971.

A 3 PER CENT RATE OF INCREASE IN MONEY WOULD
RESULT IN A CONTINUATION OF DECLINES IN REAL OUTPUT INTO
EARLY 1971, BUT REAL OUTPUT WOULD RESUME ITS ADVANCE BY
MID-1971. UNEMPLOYMENT WOULD RISE SOMEWHAT, BUT THE
STAGE WOULD BE SET FOR SUBSTANTIAL PRICE IMPROVEMENT IN

FINALLY, WITH A RAPID 6 PER CENT RATE OF MONETARY
EXPANSION, INCREASES IN REAL OUTPUT WOULD BE SET IN TRAIN
BY MID-1970 AND REACH A 4 TO 5 PER CENT RATE BY MID-1971.
SUCH A COURSE OF MONETARY EXPANSION WOULD STILL SEE PRICES
INCREASING AT A 4 PER CENT ANNUAL RATE IN MID-1971.

I FAVOR THE INTERMEDIATE POSITION, A MODERATE
RATE OF MONETARY EXPANSION IN THE NEIGHBORHOOD OF 3 TO 4
PER CENT. SUCH A RATE, IN MY OPINION, WOULD BE OPTIMAL
AMONG THE SET OF ALTERNATIVES EXAMINED. THERE WOULD BE
ONLY A RELATIVELY MILD AND BRIEF SLOWDOWN, BUT REAL OUTPUT
WOULD BEGIN TO INCREASE IN MID-1971. ASSOCIATED WITH THAT
POLICY WOULD BE A SETTING OF THE STAGE FOR SUBSTANTIAL
IMPROVEMENT IN OUR PRICE PERFORMANCE IN LATE 1971 AND
1972.
Conclusion

My outlook for the coming year does not present a very optimistic view of short-run prospects for curbing the present inflation in the United States. As a result of our economic heritage from 1965 to 1968, moderation of upward price trends will be slow. We estimate that not until 1972 will the rate of price increase be reduced to below the 1954-64 trend rate of 2 per cent.

According to most measures, we are in a mild recession. However, an attempt to avoid a further decline in real output this year by shifting to a rapid rate of monetary expansion, would mean the fight against inflation would be seriously postponed.

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 goes on, the longer time it takes to achieve price stability again. We learned that lesson from the experience of the Korean War inflation.

We are now at that stage in our efforts for economic stability when everything looks bad. There are as yet few signs of slowdown in inflation and yet the decline in real output has caused unemployment to increase to 5 per cent, the highest rate in five years. All one can do at this
POINT IS TO COUNSEL PATIENCE. THE APPROPRIATE POLICY
ACTIONS HAVE BEEN TAKEN, BUT, AS WE HAVE SEEN, IT TAKES
TIME FOR THE DESIRABLE CONSEQUENCES TO SHOW THEMSELVES
IN THE MARKETPLACE.
# Simulations of Alternative Rates of Monetary Expansion

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Key to Abbreviations:
- Y = Nominal GNP
- X = Real GNP
- P = GNP Price Deflator
- M = Money Stock

1/ Rates of change in money projected from I/1970. High-employment Federal expenditures projected on basis of fiscal 1971 budget, adjusted to include the change in the timing of the Federal pay raise.