

GOVERNMENT DEFICITS, MONETARY POLICY, AND INFLATION

Remarks by
Darryl R. Francis, President
Federal Reserve Bank of St. Louis
before the
Summer Workshop of the University of Wisconsin
LaCrosse, Wisconsin
July 9, 1975

Early this year President Ford announced one of the most ambitious programs of fiscal action ever undertaken in this country. The program consists of (1) a substantial rise in Federal expenditures, and (2) a series of tax changes that are designed to lower the average tax rate in calendar 1975. These fiscal actions are projected to result in a massive budget deficit at least through mid-1976. Although there is very little disagreement that current economic policies should be aimed at expanding economic activity, considerable disagreement has arisen about the effects of the massive deficit on financial markets and the future course of inflation.

I, for one, find very little evidence to indicate that deficit spending per se produces lasting stimulative effects on the economy. The longer-run effects of deficit spending, as I will indicate later on, do not appear to have increased the longer-run growth of output of the economy. If anything, they may have decreased productive efficiency, thereby lowering long-run growth of output from what it

would have been otherwise. I believe it is very important that we should be concerned now with the long-run effects of the proposed massive deficit and with the mechanism through which the deficit may affect not only our standard of living but also our freedom of choice.

From early 1973 through the first quarter of this year, the U.S. economy moved progressively into the worst of all possible worlds--falling real output, rising unemployment, and accelerating inflation. This was an abrupt change from what had occurred earlier. From the end of the recession in 1970 to early 1973, the economy had showed remarkable progress, with real output growing at an average annual rate of 6.7 percent, unemployment falling to 5 percent of the labor force, and prices rising at slightly less than a 4 percent annual rate.

In contrast, from the first quarter of 1973 to the fourth quarter of 1974, inflation accelerated with a vengeance, averaging about a 10 percent annual rate. Since late in 1974 it has moderated, but continues to be very rapid relative to previous periods. Real output growth slowed to about a 2 percent rate during 1973, and then declined at a 6 percent rate from the end of 1973 to early 1975. During the past year unemployment rose to a very high rate by post-World War II standards. Given this steadily deteriorating situation with respect to

production and unemployment, it is not surprising that the Administration has launched a very aggressive program of fiscal action.

As a central banker, my concern with these fiscal developments stems from my realization that fiscal actions and monetary policy cannot be put into separate compartments. Spending and taxing decisions by the Government have a major influence on the type of economic environment within which monetary policy is formulated. The Federal Reserve has to accept the fact that the Federal Government will be selling a massive amount of new securities in fiscal 1976. Therefore, I would like to share with you some of my thoughts on the problems that this large deficit financing is likely to create for monetary policy.

The Government could finance the deficit by selling bonds to the public, using the money received from the sale of bonds to buy goods and services and to make transfer payments. After the Government has completed its expenditures, the public would hold more Government bonds and the same amount of money as before. Under these assumptions the upward pressure on interest rates on Government bonds could be expected to be greater than otherwise.

Alternatively, the Federal Reserve System might increase its holdings of Government debt. Although the Federal Reserve does

not buy new issues directly from the Treasury, except to roll-over Treasury securities it already holds in its portfolio, it may, through open market operations, buy Government securities that are held by the public.

The effect on the growth of the money supply is essentially the same in either case. When the Federal Reserve buys Government securities, bank reserves increase and, hence, the money supply increases. To the extent that Federal Reserve purchases reduce the increase in the stock of Government securities that are held by the public, upward pressures on interest rates are initially mitigated by these central bank purchases. I emphasize the word initially because, to the extent that such purchases result in an acceleration in the growth of money, and subsequently raise the trend rate of inflation, interest rates will be higher later on.

Government deficits, by themselves, do not necessarily lead to increases in the rate of growth of the money stock, nor do they cause inflation. The inflationary impact of a deficit depends primarily upon the extent to which the Federal Reserve monetizes the deficit through open market purchases and the extent to which the corresponding growth in the money stock causes aggregate demand to exceed productive capacity. Looking at the results for two time periods, 1952-62 and 1969-74 shown in Table I, we can see this process in operation.

One major difference between these periods is the average annual increase in net Government debt. During the most recent five-year period the average annual increase in net Government debt was about 5 times as great as in the ten-year period 1952-62-- 13 billion dollars per year versus 2.6 billion dollars per year. In the first period the dollar change in the money stock was approximately equal to the change in net Government borrowing.

Over the last five years, however, the money stock increased about 8 billion dollars more than the increase in the net debt. The Federal Reserve System purchased an equivalent of about 40 percent of the increase in net Government debt over the last five years, as compared to about 25 percent over the ten-year period 1952-62. Consequently, the money stock grew at an average annual rate of about 6 percent over the last five years, compared to a less than 2 percent rate over 1952-62.

What was the net result, on average, of larger deficits and a more rapid growth rate of money? Referring again to Table I, we see that real output grew at about the same rate in both periods and the unemployment rate averaged about the same. The really marked difference was in the rate of inflation and in the average level of interest rates. During the last five years inflation averaged almost 6 percent, compared to 2 percent in the previous period. Long-term

TABLE I

**Relationship of Government Deficits, Federal Reserve Holdings of Debt,
Money Stock, Economic Activity, and Interest Rates**

(Dollar amount in billions)

| Period | Deficit | Change in: | | | Annual Rates of Change | | | Interest Rates | | |
|------------------|----------|--------------------------------------|---|----------------|------------------------|----------------|----------------------|------------------------------------|--|--------------------------------|
| | | Net Government Debt ^{1/} | Fed Holdings of Securities ^{2/} | Money Stock | Money Stock | Real Output | Prices ^{3/} | Unemployment Rate ^{4/} | 3-Month Treasury Bill ^{4/} | Corporate Aaa ^{4/} |
| <u>1952-1962</u> | | | | | | | | | | |
| Level Change | | \$26.1 | \$ 6.6 | \$24.5 | 1.8% | 3.0% | 1.9% | 5.1% | 2.36% | 3.77% |
| Avg. per year | - \$1.7 | 2.6 | 0.7 | 2.5 | | | | | | |
| <u>1969-1974</u> | | | | | | | | | | |
| Level Change | | \$64.4 | \$25.7 | \$72.2 | 6.2% | 2.5% | 5.8% | 5.4% | 5.93% | 7.73% |
| Avg. per year | - \$13.0 | 12.9 | 5.1 | 14.4 | | | | | | |

^{1/} Excludes debt held by U. S. Government Agencies and Trust Funds.

^{2/} Federal Reserve holdings of securities include only those securities included in the national debt. It excludes Federal Reserve holdings of Government agency securities, and acceptances which are included in Federal Reserve Credit.

^{3/} GNP Price Deflator

^{4/} Average for rates during 1953-1962 and for 1970-1974.

interest rates were more than twice as high, on average, as in the previous period. The historical experience during these two periods seems to indicate that a substantial increase in deficit spending, accompanied by a somewhat larger creation of money, has raised the rate of inflation which correspondingly raised nominal interest rates.

I do not believe that the intention of the Federal Reserve over the last 5 years was to create an amount of money equal to the substantial rise in the net Government debt. However, System actions have been directed toward resisting "substantial" movements in interest rates, and a significant increase in the amount of Government securities sold in the market means that interest rates on Government bonds tend to rise, given that other factors remain unchanged.

If the Federal Reserve attempts to resist these upward pressures on interest rates, then it has to accelerate its purchase of Government securities. Consequently, bank reserves, monetary base, and the money supply grow more rapidly. The more rapid growth in money leads to increased demands for goods, services, and credit and, eventually, to a more rapid rate of increase in prices. The increase in prices, in turn, puts further upward pressures on interest rates. A cumulative process develops. It is precisely through this channel that the link between the size of the deficit, rapid money growth and, hence, inflation develops.

Let me now turn to a consideration of some of the factors likely to influence the path of interest rates over the next year. As soon as we start to discuss the possible effects of such large deficits on financial markets and interest rates, we rapidly sail into uncharted waters. The results of one's analysis depend crucially upon the assumptions one makes about economic recovery and the behavior of commercial banks.

However, let us begin with a few statements with which all of us should agree. First, as a result of the Government selling enormous amounts of securities, interest rates will be higher than they would have been in the absence of such Government demands on the credit market. Second, if the recovery in economic activity materializes, and almost all forecasters are predicting it will, there will be a rise in the demand for credit from the private sector. Third, as a general rule, commercial banks prefer making business loans to buying Government securities. Fourth, the Federal Reserve has traditionally tried to resist any tendency for market interest rates to move sharply up or down.

Before I continue, I would like to make a distinction between fundamental forces affecting the level of interest rates and short-term factors that appear to have been influential in recent movements of short-term interest rates. Two basic factors that I

believe currently underlie the level of interest rates are: (1) the underlying trend rate of inflation, and (2) the changing composition of Government spending.

Given the past rates of monetary expansion, our research indicates that the underlying trend rate of inflation is still in the neighborhood of about 5 or 6 percent. Since this trend rate has been established over a period of as long as perhaps five years, the substantial slowing in the growth rate of money since about mid-1973 has only started to reduce it.

I believe there is a further fundamental force that has been operating over the last few years to raise the average level of interest rates. This is a subtle factor which has perhaps been overlooked. To understand it one has to realize that interest rates reflect the time preference of decisionmakers in the economy. The interest rate indicates how much future consumption must be given up to increase present consumption. If people develop a stronger preference for current consumption, then they must be offered a higher price to persuade them to forego current consumption. In other words, the interest rate will be higher to the extent that people prefer to consume now rather than in the future.

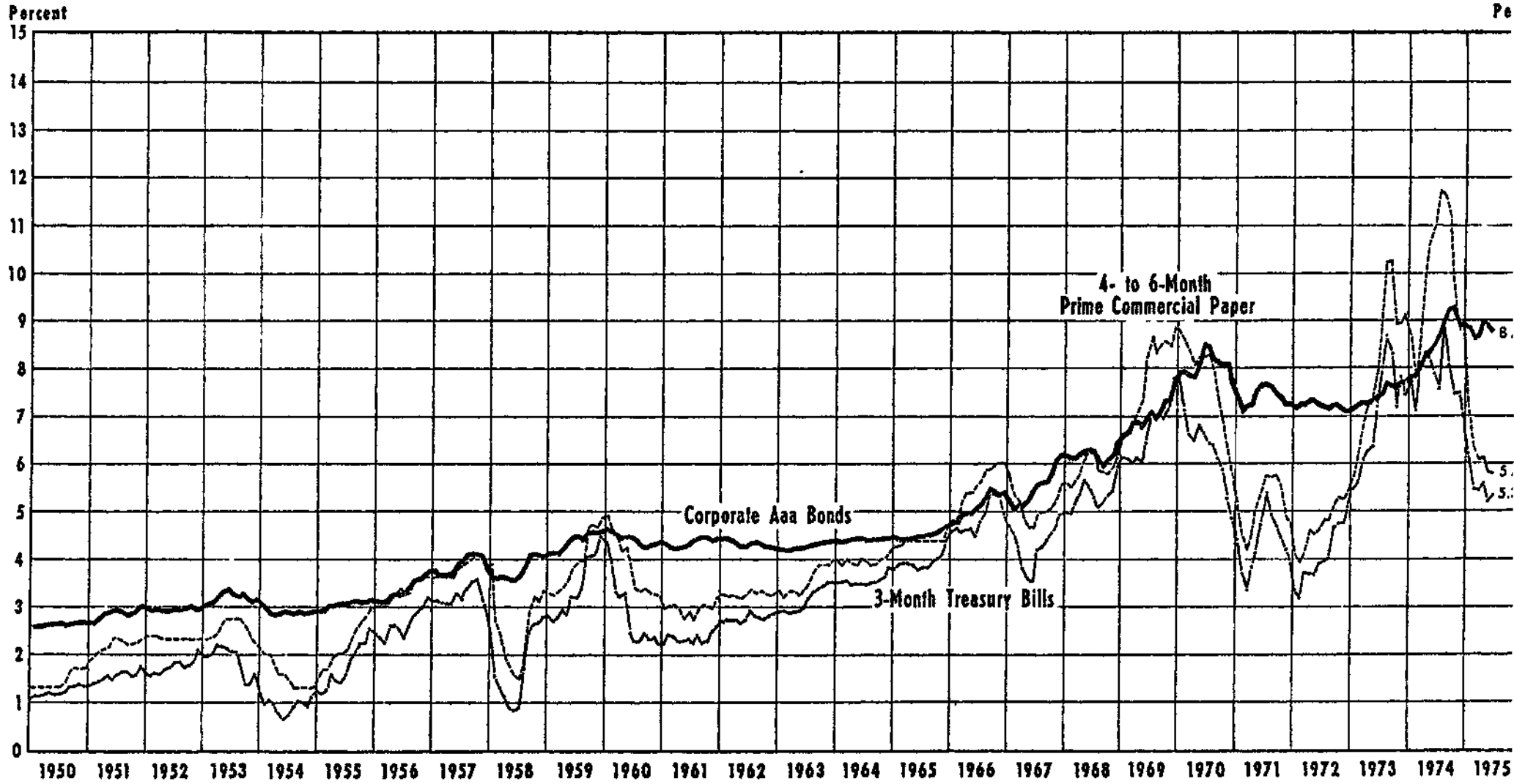
In recent years an increasing proportion of Government expenditures has gone into transfer payments. In the period 1955 to 1960, transfer payments accounted for about 23 percent of Government

expenditures; over the next five years they averaged about 26 percent. In the last five years this proportion has risen to about 35 percent. Transfer payments have become the growth sector of Government expenditures.

These types of expenditures by the Government do not reflect a demand by the Government for goods and services such as highways, hospitals, schools, and so on. They result mainly in income redistribution and ultimately appear as an increased demand by recipients for short-lived assets; that is, current consumption expenditures. In effect, the Government is mandating a shift in time preference from longer-lived assets, such as capital goods, toward current consumption. Consequently, interest rates--the price of consuming in the present rather than the future--are higher than they would have been without this mandated shift in time preference.

The combined influence of accelerating inflation and rising transfer payments is clearly evident in the behavior of long-term interest rates since about 1966, the point at which I would date the inception of both of these factors. As shown in Chart I, long-term interest rates have generally moved steadily upward since 1965. The only period when this upward trend was halted was during and following the 1970 recession. For a short period of time the rate of growth of prices slowed, partly due to the reduction in money growth in 1969 and partly due to the temporary cosmetic effect of wage and price controls in late 1971. In 1973 long-term interest rates began a further

Chart I
Interest Rates



Latest data plotted. June

Prepared by Federal Reserve Bank of St. Lou

rapid upward movement and then declined slightly near the end of 1974.

However, even after the substantial slowing in real output that we have experienced, long-term rates remain about twice as high as they were in the period 1950-1964. Also, it is interesting to observe that although the current slowdown in economic activity is longer and more pronounced than 1970, long-term rates today are still above the peaks they had reached in 1970.

Let me now turn to what I consider to be some short-term factors currently affecting the level of interest rates. The behavior of short-term interest rates over recent months has reflected a substantial decline in the private sector's demand for short-term credit. Part of this decrease has been offset by the Government's increased demand for credit. On balance, however, private demand for credit has fallen enough to result in lower short-term interest rates.

The decline in private credit demands has been especially prominent at large commercial banks, where the outstanding volume of business loans has fallen by about 12 billion dollars since mid-December. The fall in the demand for bank credit by businesses has resulted in a sharp drop in the prime rate, and the rate of return on Government securities has thus become more attractive to banks.

As a result, banks have substantially increased their holdings of securities, as is usually the case in periods when economic activity slows.

As economic recovery progresses, however, the banks should face a renewed surge in demand for credit. Past behavior of banks surely indicates that under these conditions we should not expect a continued substantial rise in the proportion of Government securities held in bank portfolios. For example, during the previous period of economic expansion, from the first quarter of 1971 to the first quarter of 1973 bank credit grew by about 130 billion dollars, but banks' holdings of Government securities increased by less than 2 billion dollars.

The gist of this discussion is that, for long-term interest rates to decline much further, the growth rate of money would have to be at a rate below 6 percent, but under developing circumstances this will be a difficult target to attain. Also, shortly after the economy begins to recover there will be considerable pressure for a substantial upward movement in short-term interest rates.

As the recovery progresses, it does not seem likely that the Treasury will continue to be able to sell Treasury bills at close to a 5 percent yield. Banks will first reduce the rate at which they add Government securities to their portfolios, and may eventually reduce their holdings of Government securities. The rise in short-rates will likely spread across the

spectrum of all interest rates, with upward pressures developing on the Federal funds rate as banks bid for reserves to expand bank credit.

Chairman Burns has announced that the Federal Open Market Committee's desired growth range for money is 5 to 7 1/2 percent from March 1975 to March 1976. One of my greatest concerns about the enormous Government deficit is that the public and political attention paid to market interest rates might make the short-run trade-off, between achieving the monetary targets versus resisting interest rate increases, especially unpleasant.

If the Federal Reserve were to resist any tendency for interest rates to rise markedly, as has been the case in the past, then the growth of the money stock would accelerate rapidly. Unfortunately, the pattern seems to have been that sharp rises in interest rates have been associated with more rapid money growth and sharp declines in interest rates have been associated with substantial reductions in the growth of money.

To put the dilemma faced by the monetary authorities into perspective, let me give you a few numbers to illustrate what I think would be a growth rate of the monetary base consistent with the long range target, and what this seems to imply for the growth of bank credit and the amount of Government debt that must be absorbed by the nonbank public. These numbers should not be taken as indicative

of exact projections, but only as representing the magnitude of the problems that we face.

In order to hold the growth of the money stock at a 5 to 7 1/2 percent rate from March 1975 to March 1976, I would estimate that we could permit, at most, about a 7 to 8 percent growth of the monetary base over this period. This translates into only about a 9 billion dollar increase. If member bank borrowings rise from their current very low levels, and if some open market purchases occur in agency securities and acceptances, this implies the Federal Reserve could buy only around 8 billion dollars of the increase in Government debt. A rise of 9 billion dollars in the monetary base translates into the neighborhood of a 55 to 60 billion dollar rise in bank credit.

The next major question is how much of this rise in bank credit occurs as increased purchases of Government securities by banks. If we assume that bank loans grow only 5 percent from March to March, an historically very low rate, then this would mean that bank holdings of Government securities could rise by about 35 billion dollars, about a 60 percent increase. It also assumes that banks would not increase their holdings of any other type of securities such as municipal bonds.

Combining purchases of the Federal Reserve and the commercial banks, this would amount to about 45 billion dollars of Government securities. This would leave on the order of 35 billion dollars of new

Government securities to be absorbed by the nonbank public over the period from March 1975 through March 1976. By contrast, the nonbank public acquired, on average, only 10 billion dollars of Government debt over the five-year period from the end of 1969 to the end of 1974.

Given the enormous size of the projected increase in the Government debt, and given the concern that substantially increased interest rates are undesirable, I believe we face a severe challenge in the conduct of monetary policy over the next couple of years. I believe the challenge can be met. However, in order for us to avoid a substantial, and what I consider excessive, growth of money, there must be a break in the historical pattern of the Federal Reserve acquiring an increasing proportion of the national debt. Interest rates must be permitted to rise to whatever level is necessary to restrict the growth of the monetary base over the period from March 1975 to March of next year to no more than 8 percent. Each increase in the amount of deficit spending makes the problem more difficult.

The upshot of this discussion and of the tentative estimates of near-term developments is that we are faced with some unpleasant choices. The built-in inflation and the composition of Government spending indicate a higher level of interest rates in the immediate future than that which we experienced in previous periods when the trend growth of money was much slower. The projected huge Government deficit and

the expected increase in private borrowing suggest rising short-term interest rates. Past experience convincingly shows that the pressure on monetary authorities has been to resist increases in interest rates and the probability is high that these pressures will continue.

If short-term interest rates are permitted to rise now and the Federal Reserve maintains a reasonable growth of the money stock, the economy will still revive, and inflation and interest rates should stabilize in the long run. But if we were to resist short-run tendencies for interest rates to rise, then I am afraid that we would have to brace ourselves for more severe inflation and much higher interest rates a year or two from now. In such event, I would not be surprised to see pressures for wage, price, and credit controls again rear their ugly heads. Associated with this would be even further intervention by the Government in our daily business affairs.

The real long-run solution, in my opinion, lies in achieving and maintaining a balanced Government budget. As we have seen, increased Government spending has not resulted in higher average output or a reduced unemployment rate, but has subjected the economy to inflation and high interest rates. Until this fact is understood, I am afraid we might be toying with the demise of free enterprise, economic and political freedom, and a drastic reduction in our standard of living.