The Road to Accelerating Inflation Is Paved with Good Intentions

First Annual Monetary Policy Lecture, delivered by DARRYL R. FRANCIS, President, Federal Reserve Bank of St. Louis, to the School of Banking of the South, Louisiana State University, Baton Rouge, Louisiana, June 1, 1971

It is good to be here this evening, and it is an exciting experience for me to deliver the "First Annual Monetary Policy Lecture" to the School of Banking of the South. I have felt for a long time that people engaged in banking should become more familiar with the influence of monetary policy actions on the economy. Increased public awareness of the ways policy decisions are made, and the ways stabilization actions work, may help to move us towards better policies in the future. I wish you a long and successful lecture series.

As we approach the mid-point of 1971, I wish I could say to you that it is my belief that the battle against inflation is nearing successful completion and that we can now turn our primary attention to moving the economy quickly back towards its noninflationary, high-employment growth potential. Unfortunately, this is not the case. I must report that I am just as concerned now about the long-run inflationary trend of the U. S. economy as I was last year and the year before.

Tonight I will trace the economic developments from the mid-1960's to the present which, in my opinion, created the present inflationary environment and cause me great concern regarding the prospects for achieving price stability in the near future.

It is important to make clear at the outset that I do *not* believe anyone desires a continuation of the inflationary trend in this country. However, I do believe that there is a danger of focusing too much attention on other immediate objectives, and that the consequences of resulting actions could lead to a re-acceleration of the rate of inflation, contrary to our desires. I will elaborate more fully on this view after looking back to the events which led to our present situation.

Approach to Analysis

Throughout my remarks I will be drawing heavily on research of the Federal Reserve Bank of St. Louis. In recent years our economists have been exploring new approaches to empirical measurement of the response of total spending, real product, prices, the unemployment rate, and market interest rates to various monetary and fiscal actions. This research has shown that changes in the nation's money stock – that is, demand deposits at commercial banks and currency in the hands of the public – provide a reliable indicator of the influence of monetary policy actions on total spending in the economy.

Furthermore, evidence has been provided and become widely accepted that the levels of, or changes in, market interest rates do *not* give a reliable indication of the "tightness" or "ease" of stabilization policy actions. On the contrary, it has been shown that market interest rates are significantly influenced by the

past rate of inflation and people's expectations with regard to the future rate of inflation.

Finally, the ongoing work by our research staff is attempting to quantify the immediate and delayed responses of real product and prices to a pronounced change in the rate of increase of total spending. We have been able to make fairly reliable predictions of the rate at which total spending will accelerate or decelerate in response to substantial accelerations or decelerations in the growth of the money stock. There is less certainty, however, about the breakdown of the changes in total spending into the real product and price component parts. The range of estimates on this breakdown is especially large at a time when there appears to be substantial slack in the economy, in the form of unused plant and equipment capacity and relatively high unemployment, while there continues to be a fairly high rate of inflation as a result of previous excesses. I believe that a careful study of events from the mid-1960's to the present sheds considerable light on the risks that would be incurred by underestimating the speed at which substantial inflationary pressures would be rekindled if prolonged monetary stimulus resulted from efforts to achieve other short-term objectives.

Background to the Current Situation

I turn now to consideration of past developments which seem to provide clues to assessing our future course.[1] In this review I will emphasize the fact that avoidance of increased inflationary pressures was at all times a fundamental desire of stabilization authorities. For the most part, however, the actions actually taken were with a view to achieving other near-term objectives. It is my opinion that this succession of actions taken to deal with goals other than achieving price stability has added up to an unintentional long-run acceleration in the rate of inflation.

The review begins with 1964, the last year of a six-year period of relative price stability. Growth of both total spending and real product strengthened throughout that year as a result of the continuing monetary stimulus initiated in 1963 and the tax-cut of March 1964. The published record of Federal Reserve policy actions[2] shows that for the first eight months of 1964, policy was conducted with a view to maintaining prevailing conditions in the money markets. In the final four months, System actions were directed to move towards slightly firmer conditions in the money markets. However, the rate of growth in total spending was increasing, and the public was demanding a growing amount of credit to finance increased spending. Consequently, System holdings of Government securities rose fairly rapidly, as the tendency for market interest rates to rise was resisted by open market purchases of securities. The result was progressively more rapid rates of growth in the nation's money stock. On balance for 1964, money rose 4.5 per cent, over twice as fast as the average growth rate during the previous decade.

As a direct consequence of the growing monetary stimulus in 1964, 1965 became the first of many years of mounting inflationary pressures. Reflecting back on 1965, I find it to be a year of great paradox. At each of the sixteen meetings of the Federal Open Market Committee in that year, the ultimate policy objective was to avoid emergence of inflationary pressures, yet monetary actions were more stimulative than at any time since the Korean War. Throughout the year the operating instructions for policy were to maintain the same or slightly firmer conditions in the money markets. In view of the increasing demands for credit, this meant, in effect, that open market operations were to be conducted so as to keep interest rates from rising significantly. Yet interest rates did rise a significant amount in 1965, in spite of record purchases of securities in the open market by the Federal Reserve.

This is where the paradox comes in. Restrictive policy was desired in order to combat inflation, and many observers contended that the rising interest rates were an indication that restraint was achieved. But I think a closer look indicates that the rising interest rates were not at all restrictive, while the actions to resist the upward trend of interest rates were very stimulative.

During ten of the sixteen policy periods in 1965, open market transactions were directed to take account of the U. S. Treasury financing activity. As I see it, the problem was that the public demand for

[1]Federal Open Market Committee policy actions for each year have been discussed in detail in the following articles published in this *Review*: "Implementation of Federal Reserve Open Market Policy in 1964," (June 1965); "Federal Reserve Open Market Operations in 1965: Objectives, Actions, and Accomplishments," (June 1966); "1966 – A Year of Challenge for Monetary Management," (April 1967); "1967 – A Year of Constraints on Monetary Management," (May 1968); "Federal Open Market Committee Decisions in 1968 – A Year of Watchful Waiting," (May 1969); "Federal Open Market Committee Decisions in 1969 – Year of Monetary Restraint," (June 1970); and "The Year 1970: A 'Modest' Beginning for Monetary Aggregates," (May 1971).

[2]All quotes and references to policy instructions in this speech are from the *Annual Report of the Board of Governors of the Federal Reserve System* unless specified otherwise.

credit to finance an accelerating rate of total expenditures was growing very rapidly, and at the same time the Government was incurring very large deficits as expenditures rose rapidly to finance the Vietnam War buildup along with mounting nondefense outlays. Since Federal Reserve policy actions were conducted with an immediate objective of maintaining stable or only slightly rising interest rates, System actions provided increased bank reserves at a very rapid rate. This, in turn, resulted in "a record expansion of bank credit and deposits" to finance the faster rate of spending of the public and government.

Early in 1966 policy objectives shifted to "moderating the growth in the reserve base, bank credit, and the money supply" in order to resist inflationary pressures. However, through April of 1966 policy actions were constrained by continued Treasury financing. As a result, the money stock rose at a very rapid 6 per cent rate from May 1965 to April 1966.

Here I must emphasize that the 6 per cent rate of money growth in 1965 and early 1966 was sufficiently rapid to stimulate substantial inflationary pressure, even though real product was growing very rapidly as prior unused capacity declined. The rate of price advance as measured by the GNP deflator moved up from about 1½ per cent in early 1965 to over 3½ per cent by mid-1966. The acceleration of consumer price increases was even greater.

The last nine months of 1966 marked a period of effective restrictive action to combat inflation. The growth of the money stock dropped to zero, as interest rates were allowed to rise in response to market demand. Policy instructions explicitly called for a reduction in bank reserves, as fighting inflation finally became a more important objective than maintaining relatively low interest rates, or stable money markets, or accommodating Treasury financing.

You may recall that the economy survived a "credit crunch" in the early fall of 1966, as the continued strong demands for credit in the face of restrictive monetary actions resulted in a temporary upward spurt in market interest rates. In comparison with recent interest rates, those of the 1966 credit crunch period look rather low. The yields on neither short- nor long-term market securities rose above six per cent at their peak levels.

There is an especially important lesson here. During 1964 and 1965, policy actions were directed towards maintaining relatively low interest rates, but the efforts were in vain, since the resulting rapid growth in money generated inflation and rising interest rates. On the other hand, following the nine-month period in 1966, when the immediate attention of policy actions was turned to controlling the growth of monetary aggregates in order to combat inflation, lower interest rates accompanied the slower growth of total spending and easing demands for credit.

The restrictive monetary actions of 1966 were followed by a sharply slower rate of growth of total spending and real product in late 1966 and the first half of 1967. This was the period of the so-called mini-recession. As the growth of total spending in the economy slowed, the immediate objective of policy turned to other near-term goals such as stimulating renewed real economic growth, maintaining the lower interest rates that had resulted from previous restrictions, and facilitating continued large Treasury financing activities. During most of the first half of 1967, there was a definite desire to move policy in the direction of ease. Since the growth of total demand continued to slow in delayed response to the restraint of 1966, demands for credit continued to be moderate and market interest rates continued to fall. Even with falling interest rates making money market conditions easier, System open market purchases of securities increased, resulting in a rapid resumption in the growth of the money stock.

The very clear intention of policymakers was to be only as expansionary as necessary to promote growth of real production, but not so stimulative as to refuel the inflationary forces. During the spring, however, policy ceased seeking still easier conditions in the money market, and sought only to maintain the easier conditions that had developed. Although concern was being expressed about the possibility of re-emergence of inflationary pressures, other immediate considerations received more weight.

By June the economy was strengthening rapidly, and a definite tendency developed for all market interest rates to rise. Once again, as in 1964 and 1965, open market policy actions turned towards a direct attempt to prevent market interest rates from rising further in response to growing public demands for credit and extremely heavy Treasury financing requirements.

The published public policy record shows that through the summer and well into the fall of 1967, a dominant reason for attempting to slow the uptrend in interest rates was the view that higher interest rates might reduce the flow of funds into mortgages and slow the recovery of residential construction activity. Also, some argued that higher interest rates might

have adverse effects on the flow of funds into financial intermediaries such as savings and loan associations. Inasmuch as the U. S. Treasury borrowed over $23 billion in the fiscal year beginning in July 1967, money and capital markets were under great pressure. Consequently, many contended that open market operations by the Federal Reserve should hold interest rates down in order to avoid these many undesired effects. In response, the System expanded bank reserves and the money stock at very rapid rates in this period.

Furthermore, in the fall of 1967, some felt that policy actions should be constrained from becoming restrictive, because of the possible adverse effects such actions might have on the position of the British pound sterling in the foreign exchange markets. The prevailing view was that if System actions became less expansionary through reduced purchases of securities in the open market, and market interest rates rose as a consequence, relatively more international capital might flow out of Britain and into the United States. Such events might, in turn, force the British to devalue the pound. Thus, the international situation was a more immediate concern of policymakers than was the avoidance of renewed inflationary pressures. As you may recall, the British devalued the pound in late November 1967 in spite of the good intentions of United States policy.

By the end of 1967, it finally became clear that inflationary pressures were building up rapidly and some restraint would have to be exercised in order to avoid greatly overheating the economy. However, policy actions were constrained to allowing only slightly firmer conditions to develop in the money market, because of the continuing concern about the possible adverse effects of higher interest rates on financial intermediaries.

This is a puzzling period to assess. The experience of 1964 and 1965 had shown that direct policy actions attempting to maintain low interest rates would be frustrated, since the rapid growth of the money stock which resulted from the low interest rate policy caused acceleration of inflation and sharply rising interest rates. The more recent experience of 1966 had shown that an anti-inflationary policy of holding down the growth of the money stock would produce lower interest rates once the upward thrust of inflationary expectations was broken. Yet, policy actions in 1967 returned to direct attempts to maintain low interest rates. Once again the result was accelerating inflation.

If policy decisions were misdirected in 1967, it was even more true in 1968. In the first half of 1968 there was a clear consensus that a restrictive anti-inflationary policy was appropriate. Yet, short horizons and other immediate considerations forestalled restrictive actions. There was the almost ever-present Treasury financing to consider, and in March the crisis in the London gold market militated against restrictive actions.

The public policy record for early April 1968 delineates the considerations which dominated this period. Although the desirability of fighting inflation was commonly agreed upon, some argued that any firming actions should proceed with caution for several reasons. First, restrictive monetary policy was believed to be inappropriate in view of the prospects for fiscal restraint. Second, some thought the sharply rising interest rates indicated "a considerable degree of monetary restraint had already been achieved", and also there was the persistent concern that restrictive actions "might have large adverse effects on flows of funds to financial intermediaries", and such would be undesirable. Finally, there was uncertainty about the economic effects of the Vietnam War.

The second half of 1968 was a regrettable period for United States stabilization policy. In June, Congress passed the Revenue and Expenditure Control Act which raised corporate and personal income taxes and slowed the growth of Government spending. A view became very widely held in the summer and fall that this fiscal package was too restrictive and would cause too sharp a slowdown in the economy. As a result, there was an overt move towards easier monetary policy to counter this presumably very restrictive fiscal impact.

By December 1968, however, it became widely recognized that the fiscal package had little, if any, restrictive impact, and that the monetary ease had further fanned the flames of inflation. Monetary actions moved strongly towards restraint, as the growth of the money stock was curtailed in spite of continuing strong demands for credit and rising interest rates.

This marked the end, for the time being, of a two-year period of the most stimulative monetary actions since the Korean War. The direct efforts to thwart the tendency for interest rates to rise had been a total failure, since the expanding inflationary pressures had resulted in sharply higher short- and long-term interest rates.

To recapitulate so far, the rapid 6 per cent rate of growth of the money stock in 1965 and early 1966 resulted in an overall inflation rate of about 3½ per cent, and interest rates of 5½ to 6 per cent before the

restrictive actions of 1966 took effect. The still more rapid 7½ per cent growth in money throughout 1967 and 1968 ultimately resulted in the overall rate of inflation accelerating to over 5½ per cent and most interest rates peaking between 8 and 9 per cent.

Finally in 1969, policy actions brought about significantly slower growth rates of money. In turn, after a lag, the slower growth of money brought the growth in total demand down to more sustainable long-run rates. As in the credit crunch of 1966, restriction of the growth of money in 1969 temporarily resulted in sharply higher interest rates, as the inflation-fed growth in demands for credit continued very strong for a while after the supply of new funds to the market was curtailed. But, as before, once the upward thrust of expectations concerning continued inflation was broken, growth in the demand for credit slowed and interest rates began to move quickly downward.

After two major episodes of stop-and-go actions, policymakers in 1970 were in a position to benefit significantly from their recent past experience. Last year monetary policy actions moved to a moderately expansionary stance, and I have no disagreement with the growth of the money stock that resulted on balance in 1970. By year's end the quantity of money outstanding was somewhat over 5 per cent greater than a year earlier, and I think that was about right in view of the lack of real output growth and the rising unemployment we were experiencing.

However, I believe that over a longer period of time and especially under conditions of a stronger pace of real economic growth and a higher level of employment, a 5 to 6 per cent rate of growth of the money stock would prove excessive in terms of the average rate of inflation. It is my view that the longer-run noninflationary growth rate of money most likely would be on the order of 3 to 4 per cent. As the economy strengthens, I believe that the rate of growth of money should be lowered to this more sustainable range. I would like to elaborate on this view within the context of the overall experience during the post-Korean War period.

Trend Velocity of Money

During the decade ending in late 1962, money grew at about a 1½ per cent average annual rate. Both the velocity of money and the economy's productive potential increased at about a 3½ per cent average rate during this period. As a result, the overall rate of price increase was a relatively slow 1½ per cent average annual rate. Then, from 1962 to the end of 1966, which includes the period of restrictive monetary actions in 1966, the growth of money was at an accelerated 3½ per cent average annual rate. With velocity continuing to rise at its earlier pace, and potential real output growing somewhat faster, this rate of monetary expansion resulted in a quarterly rate of inflation of 4 per cent in the latter part of that period.

Following the credit crunch of 1966, the growth of money accelerated to very rapid rates, as emphasized previously. By looking across the second period of monetary restraint in 1969, the resumption of moderately rapid growth of money in 1970, and the period of very rapid monetary growth thus far in 1971, I see that the growth of the money stock has risen at about a 6½ per cent average annual trend rate since January 1967. In this period there was a marked fall in the rate of increase of velocity, and the rate of potential output growth rose slightly. Consequently, the very rapid growth of money since early 1967 has resulted in about a 4½ per cent average annual rate of inflation as measured by the implicit price deflator, and a peak rate of inflation of over 7 per cent as measured by the consumer price index.

Even if the trend growth of velocity should continue in the future to be at the recent slower rate, which, in my estimation, would be a highly optimistic outlook, a continuation of the 6½ per cent trend growth of money since early 1967 would imply a sustained 4 per cent rate of inflation. If, on the other hand, the trend growth of velocity in the future were somewhere between the low 1½ per cent rate of the past four years, and the 3½ per cent rate of the previous fifteen years, then the recent trend of monetary growth could imply as much as a sustained 6 per cent trend rate of inflation.

If I get somewhat ahead of myself by noting that the money stock has risen at a 9½ per cent rate in the past six months, I am sure that you can see why my reading of the events of the past seven or eight years gives me cause for concern. The trend growth of money from 1962 to 1966 was over twice the average rate of the previous decade. I am fairly certain that after the credit crunch of 1966, there were few who would have viewed another doubling of the growth of money to be desirable. But that is what happened in 1967 and 1968. After the high interest rate, highly inflationary developments of 1969, and the liquidity crisis of 1970, I suggest that further acceleration of the longer-term trend growth of money should be avoided at all cost. Thus, the excessively rapid growth of money in recent months gives me a feeling of "butterflies" where butterflies ought not to be.

Recent Monetary Growth

Additional insight into how rapid monetary growth has been recently can be obtained by comparing the increases in some recent periods with all earlier periods of similar length. In the last three months money rose at a 12½ per cent annual rate, which is faster than all other three-month periods since World War II. In the last six months, money rose at about a 9½ per cent annual rate, which is also faster than all other consecutive six-month periods in the last twenty-five years. Similarly, in the fifteen months since February 1970, the approximate time when more rapid monetary growth was resumed following the restraint initiated in early 1969, money has risen at about a 7½ per cent annual rate. This is faster than all but one per cent of similar length periods. This is telling evidence that recent monetary growth has indeed been very rapid, whether viewed in terms of absolute rates of growth or relative to historical experience.

Implications for the Future

In closing, I would like to review with you some factors which may have an important influence on the growth rate of money in the near future. For obvious reasons, I cannot divulge recent policy decisions, and I could not disclose the growth rate of money that is likely to result from policy actions, even if I knew. However, I can discuss some factors which might be considered in the formulation and especially in the implementation of policy, as these have been made public elsewhere.

I will indicate my judgment as to the direction of influence of some factors which seem likely to lead to excessive monetary growth if we do not profit from the experiences of the past. These factors are: Treasury financing requirements in fiscal 1972; concern over the general level and trend of market interest rates; and desires to rapidly expand growth of real product and to achieve a lower rate of unemployment as soon as possible. Obviously there is some overlap among these factors.

First, I think the direction of influence of Treasury financing requirements in the past is clear; that is, periods of large Government deficits have tended to be accompanied by rapid monetary growth. President Nixon's budget message in January this year indicated a deficit of $11½ billion in the fiscal year beginning July 1, 1971. However, as widely discussed at the time, the deficit will be larger than otherwise to the extent that national income falls short of the assumptions made by the President's advisers. Also, the deficit will be larger if there is any tendency for Congress to spend more than the President requested. According to assessments reported in the press earlier this year, the planned deficit is probably the minimum that will occur. The experiences of two previous periods, 1965 through early 1966 and 1967 through early 1968, indicate that monetary actions may result in a more rapid growth of the money stock than otherwise under conditions of substantial Treasury financing.

The second factor which must be guarded against in order to avoid continued excessively rapid growth of money, and this ties in with the Treasury financing constraint, is concern for the level and trend of interest rates. As the growth of real output in the economy accelerates during the balance of this year and in 1972, or as anticipation of inflation increases, the demand for credit to finance production, consumption, and investment will increase. Such increases in demand for credit put upward pressure on market interest rates.

There are at least two ways such a tendency for market interest rates to rise would indicate conditions which might induce excessively rapid growth of money, unless we carefully guard against them. First, interest rates have traditionally played an important role in the implementation of policy decisions, as I have illustrated previously. High or rising interest rates have frequently been identified with more restrictive monetary policy, and I doubt there is a predominant desire of policymakers to achieve a very restrictive policy stance at this time. Decisions to maintain relatively easy conditions in the money and short-term credit markets might lead to substantial purchases of securities on the open market. Such actions could very well foster too rapid growth of bank reserves and deposits, and thereby too rapid a rate of money creation, if we are not careful to avoid such a development.

The other way that a tendency for interest rates to rise might suggest rapid growth of money is the view that low interest rates, especially on longer-term securities, are essential for a recovery of real economic growth. This view holds that the market level of long-term interest rates is an important factor in business investment plans. It is argued that a rise in interest rates might "choke-off" recovery in business capital expenditures before the economy has returned to a balanced level of high-employment real growth. I am suggesting that one approach to stabilization analysis views low interest rates as being necessary for real recovery, and that stabilization actions should be directed towards achieving and maintaining low interest rates. Again, policymakers cannot accept this line

of reasoning without running the risk of excessive growth in money.

The third factor which, if given considerable weight, would tend to indicate continued rapid monetary growth is the desire for rapid reattainment of high growth in real output and a low rate of unemployment. Aside from the influence of interest rates, there are some who argue that rapid growth of money is necessary and desirable in order to reduce quickly the rate of unemployment by two or more percentage points, and to avoid the losses in output inherent in continuing to produce below capacity.

While I agree that these are very desirable objectives, I feel that achieving continued reduction in the rate of inflation is also a worthy cause. It seems that some balance between the actions necessary to achieve a quick end to the inflation and those necessary to achieve a quick return to full employment is best. Especially at the present time, those who argue for very stimulative policies should make a realistic assessment of the implications for future inflation, and indicate their willingness to accept such consequences. Given the very long lags we have observed in the past between the initiation of restrictive actions and progress towards smaller price rises, it is not sufficient to say we can fight that battle when the time comes.

Present actions must be made with full recognition of their eventual consequences. In the period we have reviewed tonight, policy actions were frequently directed towards the attainment of short- or intermediate-term objectives, such as holding interest rates down to help the housing industry or to encourage business investment. Recently, actions also have been directed towards achieving an early reduction in the average rate of unemployment, and a prompt return to growth of real output at long-run potential. However, a careful analysis of the events of this period show that actions taken to deal with an immediate concern can later have adverse effects on longer-run aspects of economic activity. Thus, it frequently appears that present actions are simply dealing with problems created by past actions. While I do not view the situation as hopeless, it is obvious that there is ample room for improvement.

In conclusion, my remarks tonight may not appear to be very optimistic. Possibly our future policy actions will be better than in the past. We have ample experience from which we can learn. If we do, then an adage regarding our ability to learn from past experience would *not* be valid, at least with regard to the conduct of stabilization policy. The adage is:

> What men learn from history,
> is that men do not learn from history.