It is good to have this opportunity to discuss some important issues at a Credit Conference of the American Bankers Association. I am especially glad to have the opportunity to discuss the distinctions and interactions between Federal Reserve monetary policy and commercial bank credit policy, as the title of my talk suggests. A common fallacy is to refer to money and credit interchangeably. A central point throughout my remarks will be that money and credit are not the same. There is no doubt that central bank monetary policies affect commercial banks' credit policies, and I would venture that the credit policies engaged in by commercial banks have influenced monetary policies. Nevertheless, one should not think of them as being the same.

I will begin by highlighting the distinction between money and credit, and with this distinction in mind, I will review recent monetary and credit developments as I see them.

As you are probably all aware, every Thursday evening the Federal Reserve releases for publication recent data on Federal
Reserve credit, bank deposits, reserves, and related items. The Friday morning editions of major newspapers usually carry a column in which these data are reported and interpreted. One Friday last year the heading of one such column in a major newspaper stated that "A Limited Easing of Credit Is Seen." The first sentence of that column told us, and I quote, "Federal Reserve credit policy appears to be moving gradually toward a less restrictive stance, banking data published yesterday showed."

That same morning a comparable column in another leading newspaper was headed by the words "Fed Reports Tight Money Back Again." The first sentence in this column told us, and again I quote, "Federal Reserve weekly statistics showed that the basic money situation has shifted back to the tight side after some temporary ease last week." One newspaper writer implied money was important, whereas the other implied that credit movements were the important factors. Presumably the authors of each of these columns had before them the same data, so apparently they chose different items as being important.

I would like to discuss the issues involved in the distinction between money and credit, and to make clear my view of the relevant measures to look at when assessing the influence of monetary actions. I shall contend that there is one appropriate measure when assessing
the impact of such actions on overall economic activity; and one should take a quite different approach when analyzing the effects on various segments of our economy of the credit policies of commercial banks and other financial institutions.

Monetary Policy

The influence of monetary policy, which in recent times in the United States has been almost the exclusive province of the Federal Reserve, operates on aggregate spending in the economy. I believe the fundamental objective of monetary policies is to provide conditions conducive to an appropriate rate of growth in demand for services, consumption goods, and investment goods. This rate of growth should be equal to the ability of the economy to produce such goods and services. I admit that it is far easier to state this objective than to achieve it. The distributional effects of monetary actions on various sectors are not usually the primary goals of the policymakers. Although such distributional effects are important and are given consideration, these effects are much less predictable than are the effects on aggregate demand.

The channel through which monetary actions affect aggregate demand is by varying the quantity of money made available to the private sector of the economy. If money is provided at a rate greater than that at which businesses and individuals desire to acquire currency and demand deposit balances, then
the effort to exchange these excess money balances for other assets will increase aggregate demand for goods and services. Conversely, if businesses and individuals desire to acquire currency and demand deposit balances faster than the rate at which the total amount of money is increasing, their efforts to build up such balances will result in a decrease in the demand for goods and services.

The primary tool of the Federal Reserve in the conduct of monetary policy is buying and selling securities in the open market. It is useful to summarize short-term monetary actions within the framework of a concept called the monetary base. When the Federal Reserve increases its holdings of Government securities, which is the dominant source component of the monetary base, the primary uses of the base, currency held by the public and bank reserves, are increased. The growth of the monetary base is the dominant determinant of the growth trend of the money stock, even though short-term movements in the money stock may also be influenced by changes in time deposits and U. S. Government deposits at commercial banks.

Studies of the money creation process conducted at the Federal Reserve Bank of St. Louis as well as elsewhere indicate that the stock of money supplied to the economy could be adequately controlled on a monthly average basis. As techniques for
establishing the appropriate amount of money to supply under varying conditions are improved and gain wider acceptance, the fundamental objectives of monetary policy, as I view them, can be met with greater reliability than in the past.

I think it is important to note that during the process of monetary expansion, the credit policies of commercial banks, interacting with forces emanating from the nonbank public, determine the sectors that are first affected. I will return shortly to further discussion of this process.

Federal Reserve "Credit Policy"

I do not intend for my remarks concerning monetary policy to imply that the Federal Reserve cannot or does not take actions which have a direct bearing on commercial banks' credit policies. Since monetary policy affects the volume of deposits in banks, both the amount and the price of credit extended by banks are affected. This is one important channel through which monetary actions influence the real sectors of the economy.

However, aside from the monetary actions of the Federal Reserve which have a direct bearing on the growth of aggregate demand for goods and services, the Federal Reserve can and does take actions which have a significant impact on the quantity, quality, and price of bank credit. Furthermore, these actions may have no more than a marginal effect on the total amount of
credit outstanding. This brings me back to my central point regarding the distinction between money and credit.

An increase in the stock of money increases the total purchasing power of the economy, whereas changes in the composition of total private sector credit may represent only a re-channeling of the flow of purchasing power that is transferred from some economic units to other economic units. When one economic unit chooses to save some of its current income by increasing its holdings of time or savings deposits at a bank, it is choosing to forego some present spending in order to preserve some purchasing power for future use. When a commercial bank, in its intermediary role, uses the proceeds of the increased deposits to purchase securities or increase its business or consumer loans, the present purchasing power preserved by one economic unit is transferred to another economic unit. This transfer permits some economic units to obtain more current command over services, consumption goods or investment goods than their own income would otherwise allow.

One example of an action that could be taken by the Federal Reserve, which would affect the credit policies of banks, would be to lower or hold the maximum interest rates banks are permitted to pay on time and savings deposits below the yields available to savers from competing institutions or financial
instruments. Under such circumstances, these deposits will flow out of commercial banks, and the amount of bank credit extended to the public will contract. In addition to a decrease in the volume of bank credit, there will be an increase in the price of such credit since banks will allocate the available supply of funds to those most willing and best able to pay, given quality and other considerations.

A decrease in the volume of bank credit resulting from such an action by the central bank will not necessarily reduce the total credit flow in the economy; only the flows through the most efficient channels are altered. The experience with regard to CDs U.S. Treasury bills, commercial paper, and direct loans in recent years confirms this point. Once short-term market rates of interest had risen to the point that the yields banks were permitted to pay on time deposits were no longer competitive, the volume of these deposits at banks declined. Banks were forced to sell securities and contract loans. However, corporate depositors merely shifted to direct ownership of short-term Government securities and to placement of short-term loanable funds on the commercial paper market.

Credit Policies of Commercial Banks

I will now turn to a discussion of the credit policies of commercial banks during the past two years, with references to the monetary actions taken during the same period. For background,
I will digress for a moment to a summary of the developments during 1967 and 1968. Throughout those two years every aggregate monetary measure, including Federal Reserve credit, member bank reserves, the monetary base, and both the broad and narrow definitions of the money supply, were expanding at excessively rapid rates. I assume that in retrospect there is little disagreement that monetary policies were highly stimulative during that period, although at the time some observers chose to point to the rising interest rates as being an indication that restrictive monetary policies were being pursued.

At the same time, total loans and investments at commercial banks were rising at historically rapid rates. Taking volume as the appropriate measure, one would say that bank credit policies were very easy. However, the borrowers were pointing to the price they were paying and arguing that credit was tight. I suspect that the nation's biggest borrower, the U.S. Treasury, felt that the price they paid for funds at the time was an indication of tight credit.

The developments in the first half of 1969 highlight the distinction between monetary and credit policies. From January to July 1969 the narrowly defined money stock (demand deposits plus currency held by the public) grew at a little more than a 5 per cent annual rate, which was somewhat less stimulative than the 7.5 per cent rate of growth of the previous two years, but certainly
not sufficiently restrictive to bring an early end to the considerable inflation that had been generated.

By early 1969 most market interest rates had reached a point where Regulation Q ceilings on the rates banks were permitted to pay on time deposits began to sharply impinge. Since banks were less able to compete for funds, total time deposits at commercial banks contracted throughout 1969. The contraction was much sharper in the second half of the year than in the first. As a result of the considerably reduced growth of total deposits, banks were forced to correspondingly reduce their rate of total credit expansion. The growth of total loans and investments in early 1969 was less than half the rate of the previous two years.

Judging from the substantially slower growth of bank credit, and the continued high and sharply rising interest rates in early 1969, it would appear that policies were much more restrictive than indicated by the somewhat reduced growth rate of the money stock. The reduced growth of bank credit, however, was manifested almost entirely in a rather sharp contraction in the security holdings of banks. There was little slowing in the growth of loans outstanding. Thus, from a loan volume standpoint, one would not conclude that bank credit available to loan customers had tightened.
Turning to the second half of 1969, there is no question that both Federal Reserve monetary policy and commercial bank credit policies were tight. The money stock was essentially unchanged from July to December 1969, which was very restrictive in view of the inflation we were experiencing. Furthermore, time deposits at banks continued to decrease as market interest rates remained high compared to the ceiling rates banks could offer. Large banks turned to nondeposit sources of funds to offset the contraction in total deposits. As a result, banks managed a small increase in the volume of credit outstanding in the second half of the year, with loans outstanding continuing to grow at moderately rapid rates while bank investments contracted almost as rapidly.

From the outset of 1970 the Federal Reserve moved in the direction of easier monetary policy and also took a series of actions which had the effect of bringing about easier credit conditions. Growth of the money stock was resumed and maintained, and by the end of 1970 the amount of money in the hands of the public was 5.4 per cent greater than a year earlier. Considering the inflationary forces continuing in 1970, monetary policy during the year should be viewed as sufficiently expansionary to prevent substantial declines in real production and provide for the gradual abatement of the rate of price advances. At the same time the monetary policy of the past year has been adequately easy to
facilitate the adjustment process of changing national priorities inherent in the partial demobilization of military forces and shifts in production from defense to non-defense related industries.

The first step taken by the Federal Reserve in early 1970 to help ease the credit flow through banks was to raise the ceilings on the rates banks were permitted to pay on small time and savings deposits. This improved somewhat the banks' competitive position in attracting funds, but probably of considerably greater significance was the decline in market interest rates.

Early in 1970 the demand for credit was contracting and short-term interest rates began declining, as a result of the sharply restrictive monetary actions of late 1969. In February 1970 market interest rates had moved down sufficiently that rates on bank deposits again became competitive, and all types and sizes of time deposits began a period of very rapid growth which has continued to the present time. With the resumption of rapid growth in total deposits, banks were again able to acquire earning assets and to reduce their use of relatively expensive nondeposit sources of funds. The composition of bank credit extended in 1970 was opposite that of the previous year. Whereas banks had sold securities in 1969 in order to accommodate a continued strong loan demand, the growth of bank credit in early 1970 was all in investments, as total bank loans remained about unchanged from December 1969 to June last year.
The very rapid growth of bank credit and the sharply declining interest rates last year indicate very easy credit conditions. However, this type of ease should not be construed as having any implications regarding subsequent strength of aggregate demand or indicating resurgence of forces contributing to increased inflationary pressures. The re-intermediation of time deposits at commercial banks reflected mainly changes in the ownership of securities and a return of the flow of credit through channels that had been closed or considerably narrowed during the previous year.

At the end of 1970 banks had increased their outstanding loans by only 4 per cent from December 1969, while bank investments rose over 14 per cent during the same period. I think it is clear that the very rapid growth in the volume of total credit extended by banks, and the significantly lower prices of that credit as the year progressed, should not be construed to indicate that the Federal Reserve was engaged in highly stimulative policies.

Suppose economic conditions had not been such in early 1970 that the Federal Reserve took actions which caused resumption in the growth of the money stock. Market interest rates on short-term instruments would have still declined in the face of reduced demand for funds, although probably not so rapidly. Generally falling short-term interest rates, together with the actions that raised or abolished the maximum rates banks could pay on some
time and savings deposits would have been sufficient to cause rapid re-intermediation of time deposits at commercial banks, even if monetary policy had remained as restrictive as in late 1969. This return of funds to banks through time deposits would have provided for a substantial increase in bank credit, although somewhat less than actually occurred.

Outlook for Monetary Policy and Credit Growth in 1971

The growth of total commercial bank credit in 1971 will be influenced both by monetary policy actions and by the rate at which time and savings deposits continue to flow into banks. For discussion purposes I will assume that monetary policy actions this year will be about the same as 1970; namely, the money stock will expand about 5 per cent. It is not unreasonable to assume that the demand deposit liabilities of commercial banks might grow at about this same rate.

Since a 5 per cent increase in demand deposits by itself would allow for only about a 2 per cent growth in bank credit, it is apparent that the volume of credit extended will be determined mainly by the flow of time deposits and by nondeposit sources of funds. In 1970 time deposit liabilities of banks increased about four times as fast as demand deposits. Although this unusually rapid growth of time deposits has continued in early 1971, it is likely that as the year progresses time deposit growth will slow to
more normal rates relative to demand deposits. Under the assumption that from April 1971 to the end of this year the relative growth of time deposits to demand deposits will be about the same as during 1967 and 1968 before Regulation Q impinged, time deposits are likely to increase by 12 to 15 per cent by the end of this year over last.

Some further run-off of nondeposit sources of funds to banks is likely to occur this year, but much less than in 1970. It seems reasonable that the net flow of funds into banks through the end of this year will provide for about an 8 to 10 per cent growth in total loans and investments.

The composition of the growth in bank credit this year will depend substantially on the strength of demand for loan funds -- especially business loans. The growth in aggregate demand for goods and services projected for this year, using our Bank's econometric model, is expected to be moderately strong and to provide for resumption of real economic growth as inflation continues to abate. Given this outlook for economic activity, business loan demand should strengthen from the rather sluggish conditions of this past fall and winter.

Summary

In closing I will re-emphasize my central point -- that money and credit are not the same thing. Primarily through open
market operations, actions of the Federal Reserve determine the rate of growth of the money stock. Numerous empirical studies have shown that marked and sustained changes in the growth of the money stock are followed by changes in the same direction of the total demand for goods and services in the economy. Our studies at the Federal Reserve Bank of St. Louis indicate that the effect on economic activity of a given change in the money stock takes about four to five quarters to work itself out.

In contrast, our research has shown that it is not possible to consistently arrive at an accurate assessment of the outlook for economic activity by relying on observations of changes in the volume of bank credit or the interest rates at which that credit is extended. There are simply too many unpredictable factors, such as the strength and composition of bank loan demand, the public's saving rate, the inflation premium agreed to by both borrowers and lenders that is reflected in nominal market interest rates, and the effects of regulations and competitive factors which affect the channels through which funds flow at various times.

In recent years we have learned that high and rising market interest rates are more likely the result of excessive monetary expansion, rather than an indication of restrictive policies. We have learned that the flow of credit through banks
depends more on regulations on interest rates and on the ability of banks to find and tap nondeposit sources of funds, than on any actions taken by stabilization authorities with a view to influencing aggregate demand. Furthermore we have learned that the volume of credit flows through banks have little impact on overall economic activity in the absence of corresponding changes in the stock of money. Also, I hope we have learned that too rapid growth of money will unavoidably cause inflation, that too slow of growth of money will force economic contraction, and that we could do far worse than to provide a steady and moderate growth in money.