Q: "How does the Federal Reserve's lowering of interest rates affect the economy?"

by Professor Jim Lee

The Federal Reserve (or simply the Fed) is the central bank of the United States. One of its functions is to conduct monetary policy, which influences the amount of money and credit, and the levels of interest rates in the economy. The Fed lowers interest rates in order to promote investment and consumer spending on goods and services. In the short run, higher spending raises overall production, employment and income.

Policy Goals

To learn about the conduct of monetary policy, it is important to first understand the Fed's ultimate goals. Its goals include the promotion of low and stable inflation, full employment and sustainable economic growth. Inflation is a sustained increase in the economy's overall price level. With high inflation, the purchasing power of money declines quickly over time, hurting businesses and consumers. When economic activity slows down, inflation tends to be low. In this case, the Fed can stimulate the economy by lowering interest rates, which in turn help boost output and employment.

Policy tools

The Federal Open Market Committee is the monetary policy unit of the Fed. Eight times a year, the Committee meets and makes decisions on monetary policy actions. Since the late 1980s, the Fed has formulated monetary policy in terms of a target for the federal funds rate and the discount rate. By adjusting these two interest rates, the Fed indirectly controls interest rates in the U.S.

The federal funds rate is the interest rate that banks charge one another for overnight loans. The funds rate fluctuates according to the supply and demand condition for bank reserves available for borrowing. The Fed adjusts the funds rate via open market operations, which involve the trading of U.S. government securities. For example, if the Fed wants to increase bank reserves so as to lower the funds rate, it will buy securities and pay for them by making deposits to security dealers' banks. As more money and liquidity are injected into the banking system, banks lower their lending rates.

The discount rate is the rate that the Fed charges banks for overnight loans. A lower discount rate encourages banks to increase reserves by borrowing more from the Fed. With additional reserves, banks will try to make more loans to businesses and households by lowering their lending rates such as the prime rate (the base interest rate on corporate loans) and home mortgage rates. Therefore, a lower federal funds rate or discount rate leads to lower market interest rates.

Policy Channels

Lower interest rates stimulate economic activity in the short run. The effects take place through several channels. First, other things being equal, lower interest rates mean lower costs of financing new physical capital and residential homes. Investment spending will therefore increase. Lower interest rates also encourage consumer spending, particularly purchases of durable goods such as automobiles and home furnishings. In response to increases in the overall demand for goods and services, production and employment will also rise.

Interest rate changes also affect the economy through stock markets. Suppose that the Fed lowers interest rates by injecting liquidity into the economy through open market operations. Higher liquidity among households raises their demand for stocks. On other hand, as lower interest rates reduce the costs of doing businesses, firms become more profitable. Either way results in higher stock prices and thus more financial wealth. Households with stronger financial positions are willing to spend more. Higher stock values also make its more attractive for firms to invest in new capital by issuing stock. Through stock markets, therefore, lower interest rates also raise the overall demand for goods and services.

Monetary policy can also affect the foreign trade sector. If U.S. interest rates fall relative to interest rates in foreign countries, then domestic money deposits will become less attractive relative to deposits denominated in foreign currencies. The result is a decline in the U.S. foreign exchange rate, meaning that more U.S. dollars are needed in exchange for one unit of foreign currency. A lower U.S. exchange rate makes domestic goods cheaper relative to foreign goods, thereby causing a rise in exports and a decline in foreign imports in the U.S.

Many foreign countries, however, try to maintain stability for their currencies in the foreign exchange market. To prevent a rise in the values of their currencies, central banks in these countries often cut their interest rates following an interest rate cut in the U.S. As a result, the economic effects of U.S. monetary policy spill over to other countries.

Long Run Effects

In the long run, however, monetary policy has no effect on economic activity. If monetary policy stimulates spending enough to push markets for output and labor beyond their long-run capacities, prices and wages will begin to rise. If workers and business people expect higher inflation in the future, they will ask for more increases in wages and prices. Higher inflation expectations also raise interest rates charged by banks and other lenders in order to compensate for an expected decline in the purchasing power of money. As a result, a monetary policy that persistently attempts to keep short-term interest rates low will eventually lead to higher inflation and higher interest rates, with no permanent increases in output or employment growth.

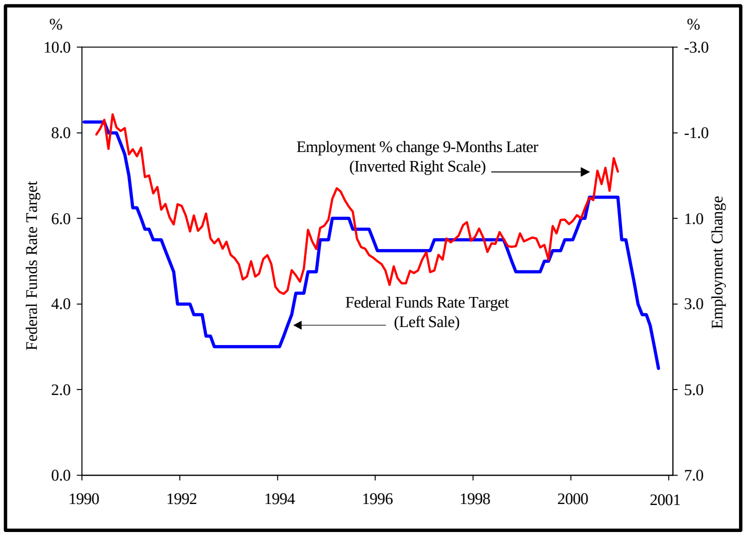
Policy Lags and Expectations

It takes time for an interest rate cut to have an impact on the economy. Many economists argue that the time lags in monetary policy are long and variable. It takes three months to two years for the overall production of goods and services to react to an interest rate change. And the time lag for the effect on inflation may be even longer. A great deal of uncertainty behind these lags comes from the fact that policy effects depend on the expectations of workers and businesses. Their expectations also affect the size of the economic impact. For example, if workers expect higher inflation immediately following an interest rate cut, then they will bargain for higher wages and push up labor costs. In this case, there will be little increase in output and employment but a quick rise in inflation.

Historical Perspective

The accompanying chart illustrates the effect of monetary policy on employment in the U.S. since 1990. At the background of the federal funds rate target is the response of employment growth, as measured by the annual percentage change in employment 9 months later. Because the employment data are shown in an inverted scale, the chart in fact indicates that falling funds rate targets, such as those in the early and mid-1990s, led to higher employment growth. The chart also suggests that the time lag between changes in the interest rate and employment growth was longer in periods before 1994 than after.

In summary, U.S. monetary policy affects not only the domestic but also the global economy. By lowering interest rates, the Fed promotes income and employment growth in the short run at the risk of higher inflation in the long run. Since January 2001, the Fed has lowered the federal funds rate 10 times to fend off a possible recession in the U.S. However, because of policy lags, it would have taken months before the U.S. economy realized higher spending on goods and services, followed by higher income and employment.



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