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Introduction to U.S. Economy: Monetary Policy

The Federal Reserve (Fed), the nation's central bank, is responsible for monetary policy. This In Focus explains how monetary policy works. Typically, when the Fed wants to stimulate the economy, it makes policy more expansionary by reducing interest rates. When it wants to make policy more contractionary or tighter, it raises rates. For background on the Fed and its other responsibilities, see CRS In Focus IF10054, *Introduction to Financial Services: The Federal Reserve*.

Federal Open Market Committee

Monetary policy decisions are made by the Federal Open Market Committee (FOMC), whose voting members are the Fed's seven governors, the New York Federal Reserve Bank president, and four other Reserve Bank presidents, who vote on a rotating basis. The FOMC is chaired by the Fed chair. FOMC meetings are regularly scheduled every six weeks, but the chair sometimes calls unscheduled meetings. After these meetings, the FOMC statement announcing any changes to monetary policy is released.

Statutory Goals

In 1977, the Fed was mandated to set monetary policy to promote the goals of "maximum employment, stable prices, and moderate long-term interest rates" (12 U.S.C. §225a). The first two goals are referred to as the dual mandate.

Statement on Longer-Run Goals

Since 2012, the FOMC has explained its mandate in the *Statement on Longer-Run Goals*. It defines *stable prices* as 2% inflation, measured as the annual percent change in the personal consumption expenditures price index. In the Fed's view, maximum employment "is not directly measurable and changes over time owing largely to nonmonetary factors that affect the structure and dynamics of the labor market."

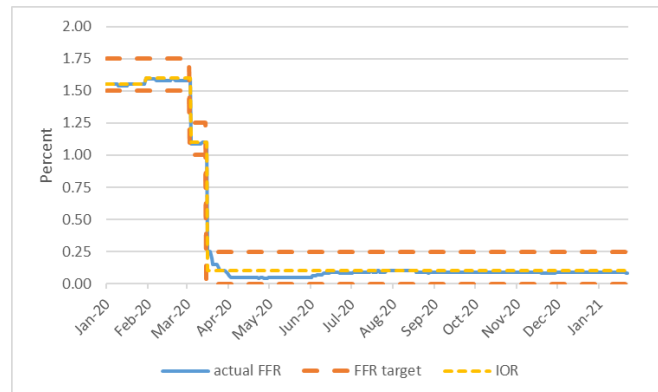
In response to the low inflation and low growth environment that dates back to the 2007-2009 financial crisis, the FOMC made significant changes to the statement in 2020. First, monetary policy would aim to make up for periods of inflation below 2% with periods of inflation above 2%, so that inflation would average 2% over time. Second, monetary policy would respond only if unemployment is high, not if it is low. For more information, see CRS Insight IN11499, *The Federal Reserve's Revised Monetary Policy Strategy Statement*.

Federal Funds Rate

In normal economic conditions, the Fed's primary instrument for setting monetary policy is the federal funds rate (FFR), the overnight interest rate in the federal funds market, a private market where banks lend to each other.

The FOMC sets a target range for the FFR and uses its tools to keep the actual FFR within that range (see **Figure 1**).

Figure 1. Federal Funds Rate
2020-2021



Source: Federal Reserve.

Notes: FFR=federal funds rate; IOR=interest rate on bank reserves.

How Does Monetary Policy Affect the Economy?

Changes in the FFR target lead to changes in interest rates throughout the economy, although these changes are mostly less than one-to-one. Changes in interest rates affect overall economic activity by changing the demand for interest-sensitive spending (goods and services that are bought on credit). The main categories of interest-sensitive spending are business physical capital investment (e.g., plant and equipment), consumer durables (e.g., automobiles, appliances), and residential investment (new housing construction). All else equal, higher interest rates reduce interest-sensitive spending, and lower interest rates increase interest-sensitive spending.

Interest rates also influence the demand for exports and imports by affecting the value of the dollar. All else equal, higher interest rates increase net foreign capital inflows as U.S. assets become more attractive relative to foreign assets. To purchase U.S. assets, foreigners must first purchase U.S. dollars, pushing up the value of the dollar. When the value of the dollar rises, the price of foreign imports declines relative to U.S. import-competing goods, and U.S. exports become more expensive relative to foreign goods. As a result, net exports (exports less imports) decrease. When interest rates fall, all of these factors work in reverse and net exports increase, all else equal.

Business investment, consumer durables, residential investment, and net exports are all components of gross domestic product (GDP). Thus, if expansionary monetary policy causes interest sensitive spending to rise, it increases GDP in the short run. This increases employment, as more

workers are hired to meet increased demand for goods and services. Most economists believe that monetary policy cannot permanently change the level or growth rate of GDP or employment but can permanently change the inflation rate, because long-run GDP is determined by the economy's productive capacity (the size of the labor force, capital stock, and so on). If monetary policy pushes demand above what the economy can produce, then inflation should eventually rise to restore equilibrium. When setting monetary policy, the Fed must take into account the lags between a change in policy and economic conditions.

Unconventional Tools at the Zero Lower Bound

Twice in its history—during the 2007-2009 financial crisis and the current COVID-19 pandemic—the Fed has lowered the FFR target range to 0-0.25% (called the zero lower bound) in response to unusually serious economic disruptions. In both cases, the zero lower bound prevented the Fed from providing as much conventional stimulus as desired to mitigate these crises, so it turned to unconventional monetary policy tools in an effort to reduce longer-term interest rates. Under *quantitative easing* (QE), it has purchased trillions of dollars of Treasury securities and mortgage-backed securities in an effort to directly lower their yield. Under *forward guidance*, it has pledged to keep the FFR low for an extended period of time, with the hope that that will reduce long-term rates today by reducing investor expectations of future short-term rates. It has also used large-scale repurchase agreements (known as repos), which are temporary purchases and sales of securities, to directly pump more liquidity into the financial system.

In addition, the Fed has responded to these crises by using its powers as lender of last resort. For more information on its actions in the pandemic, see CRS Report R46411, *The Federal Reserve's Response to COVID-19: Policy Issues*.

The Post-Crisis Policy Framework

Following the 2007-2009 financial crisis, the Fed changed how it conducted monetary policy. The Fed now maintains the FFR target primarily by setting the interest rate it pays banks on reserves held at the Fed (IOR). Unlike the FFR, the Fed sets the IOR directly. The IOR anchors the FFR, because banks will generally deploy their surplus reserves to earn whichever of the two rates is most attractive.

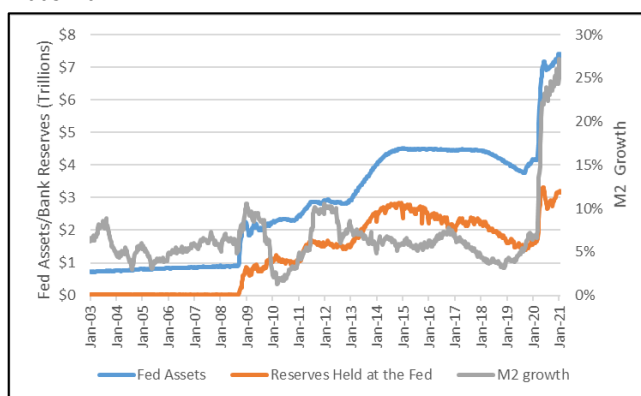
Before the crisis, monetary policy was conducted differently. The Fed did not have authority to pay interest on bank reserves until 2008, so it could not target the FFR by setting the IOR. Instead, the Fed directly intervened in the federal funds market through open market operations that added or removed reserves from the federal funds market. Open market operations could be conducted by buying or selling Treasury securities but were typically conducted through repos. (As noted above, the Fed still purchases Treasury securities and uses repos, but it no longer does so to target the FFR.)

Before the crisis, the Fed could target the FFR through direct intervention in the federal funds market because reserves were scarce—banks held only enough reserves to slightly exceed the reserve requirements set by the Fed.

Now, banks hold trillions of dollars of reserves, despite the fact that the Fed eliminated reserve requirements in 2020. The overall level of reserves is the result of Fed actions—primarily QE—that have increased the assets held on the Fed's balance sheet (see **Figure 2**) and are not a choice by banks. The Fed acquires assets by increasing bank reserves.

Figure 2. Fed Assets, Bank Reserves, and Money Supply Growth

2003-2021



Source: Federal Reserve.

Notes: Money supply growth is measured by annual % change in M2.

After the Fed ended QE in 2014, it decided to maintain abundant reserves instead of shrinking its balance sheet and returning to its pre-crisis monetary framework. With reserves so abundant, adding or removing reserves could not raise the FFR above zero in the absence of IOR.

The Money Supply and Inflation

Historically, money supply growth has been a predictor of the inflation rate. The logic behind this relationship is that inflation is caused by “too much money chasing too few goods.” Another difference since the financial crisis is that the money supply has grown at historically high levels (see **Figure 2**), but inflation has mostly been below target. The money supply has grown relatively rapidly since 2008 because of rapid growth in the monetary base, which consists of bank reserves and currency and is controlled by the Fed. Although faster money supply growth would typically cause inflation to rise, all else equal, the economy has also faced significant offsetting deflationary pressures caused by the financial crisis and the pandemic. In addition, IOR gives the Fed a means to effectively “tie up” bank reserves so that they do not contribute to inflation. Another reason inflation has been contained is because individuals have low inflation expectations—a virtuous cycle that may persist as long as individuals believe that the Fed is committed to price stability.

Congress and Monetary Policy

Congress has delegated responsibility for monetary policy to the Fed but retains oversight responsibilities. For example, statute requires the Fed chair to semi-annually produce a written report and testify on monetary policy to the House Financial Services Committee and the Senate Banking, Housing, and Urban Affairs Committee.

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