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Federal Reserve Tutorial

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Introduction

Most people are aware that there is a government body that acts as the guardian of the economy - an economic sentinel who implements policies designed to keep the country operating smoothly. Unfortunately, most investors do not understand how or why the government involves itself in the economy.

In the U.S., the answer lies in the role of the Federal Reserve, or simply, the Fed. The Fed is the gatekeeper of the U.S. economy. It is the bank of the U.S. government and, as such, it regulates the nation's financial institutions. The Fed watches over the world's largest economy and is, therefore, one of the most powerful organizations on earth.

As an investor, it is essential to acquire a basic knowledge of the Federal Reserve System. The Fed dictates economic and monetary policies that have profound impacts on individuals in the U.S. and around the world. In this tutorial, we'll learn about how the Fed is structured, find out who Alan Greenspan and Ben Bernanke are and talk about monetary policy and the Federal Open Market Committee (FOMC) rate meeting.

What Is The Fed?

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The Federal Reserve was created by the U.S. Congress in 1913. Before that, the U.S. lacked any formal organization for studying and implementing monetary policy. Consequently markets were often unstable and the public had very little faith in the banking system. The Fed is an independent entity, but is subject to oversight from Congress. Basically, this means that decisions do not have to be ratified by the President or anyone else in the government, but Congress periodically reviews the Fed's activities.

The Fed is headed by a government agency in Washington known as the Board of Governors of the Federal Reserve. The Board of Governors consists of seven presidential appointees, each of whom serves 14 year terms. All members must be confirmed by the Senate and can be reappointed. The board is led by a chairman and a vice chairman, each appointed by the President and approved by the Senate for four-year terms. The current chair is Ben Bernanke, who took over for Alan Greenspan on February 1, 2006. Greenspan had been chairman since 1987.

There are 12 regional Federal Reserve Banks located in major cities around the country that operate under the supervision of the Board of Governors. Reserve Banks act as the operating arm of the central bank and do most of the work of the Fed. The banks generate their own income from four main sources:

- Services provided to banks
- Interest earned on government securities acquired while carrying out the work of the Federal Reserve
- Income from foreign currency held
- Interest on loans to depository institutions

The income gathered from these activities is used to finance day to day operations, including information gathering and economic research. Any excess income is funneled back into the U.S. Treasury.

The system also includes the Federal Open Market Committee, better known as the FOMC. This is the policy-making branch of the Federal Reserve. Traditionally, the chair of the board is also selected as the chair of the FOMC. The voting members of the FOMC are the seven members of the Board of Governors, the president of the Federal Reserve Bank of New York and presidents of four other Reserve Banks who serve on a one-year rotating basis. All Reserve Bank presidents participate in FOMC policy discussions whether they are voting members or not. The FOMC makes the important decisions on interest rates and other monetary policies. This is the reason why they get most of the attention in the media. We'll talk about the FOMC in detail later.

Finally, all national banks and some state-chartered banks are part of the Federal Reserve System. They are referred to as member banks.

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Duties

The Fed's mandate is "to promote sustainable growth, high levels of employment, stability of prices to help preserve the purchasing power of the dollar and moderate long-term interest rates."

In other words, the Fed's job is to foster a sound banking system and a healthy economy. To accomplish its mission, the Fed serves as the banker's bank, the government's bank, the regulator of financial institutions and as the nation's money manager.

Banker's Bank
Each of the 12 Fed Banks provide services to financial institutions in the same way that regular banks provide services to individuals. This helps to assure the safety and efficiency of the nation's payments system. For example, when you cash a check or have money electronically transferred, there is a good chance that a Fed Bank will handle the transfer of money from one bank to another.

The Government's Bank
The biggest customer of the Federal Reserve is one of the largest spenders in the world - the U.S. government. Similar to how you have a checking account at your local bank, the U.S. Treasury has a checking account with the Federal Reserve. All revenue generated by taxes and all outgoing government payments are handled through this account. Included in this service, the Fed sells and redeems government securities such as savings bonds and Treasury bills, notes and bonds.

The Fed also issues all coin and paper currency. The U.S. Treasury actually produces the cash, but the Fed Banks distributes it to financial institutions. It's also the Fed's responsibility to check bills for wear and tear and to take damaged currency out of circulation.

Regulator and Supervisor
The Federal Reserve Board has regulatory and supervisory responsibilities over banks. This includes monitoring banks that are members of the system, the international banking facilities in the U.S., the foreign activities of member banks and the U.S. activities of foreign-owned banks. The Fed also helps to ensure that banks act in the public's interest by helping to develop federal laws governing consumer credit. Examples are the Truth in Lending Act, the Equal Credit Opportunity Act, the Home Mortgage Disclosure Act and the Truth in Savings Act. In short, the Federal Reserve Board acts as the policeman for banking activities within the U.S. and abroad.

The FRB also sets margin requirements for investors. This limits the amount of money that an investor can borrow to purchase securities. Currently, the

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requirement is set at 50%, meaning that with $500, you have the opportunity to purchase up to $1000 worth of securities.

Money Manager
While all the previously mentioned duties are important, the primary responsibility of the Fed is devising and implementing monetary policy. This function is so important, in fact, that we'll talk about it in detail in the next section.

Monetary Policy

The term monetary policy refers to the actions that the Federal Reserve undertakes to influence the amount of money and credit in the U.S. economy. Changes to the amount of money and credit affect interest rates (the cost of credit) and the performance of the U.S. economy. To state this concept simply, if the cost of credit is reduced, more people and firms will borrow money and the economy will heat up.

The Toolbox
The Fed has three main tools at its disposal to influence monetary policy:

Open-market Operations - The Fed constantly buys and sells U.S. government securities in the financial markets, which in turn influences the level of reserves in the banking system. These decisions also affect the volume and the price of credit (interest rates). The term open market means that the Fed doesn't independently decide which securities dealers it will do business with on a particular day. Rather, the choice emerges from an open market where the various primary securities dealers compete. Open market operations are the most frequently employed tool of monetary policy.

Setting the Discount Rate - This is the interest rate that banks pay on short-term loans from a Federal Reserve Bank. The discount rate is usually lower than the federal funds rate, although they are closely related. The discount rate is important because it is a visible announcement of change in the Fed's monetary policy and it gives the rest of the market insight into the Fed's plans.

Setting Reserve Requirements - This is the amount of physical funds that depository institutions are required to hold in reserve against deposits in bank accounts. It determines how much money banks can create through loans and investments. Set by the Board of Governors, the reserve requirement is usually around 10%. This means that although a bank might hold $10 billion in deposits for all of its customers, the bank lends most of this money out and, therefore, doesn't have that $10 billion on hand. Furthermore, it would be too

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costly to hold $10 billion in coin and bills within the bank. Excess reserves are, therefore, held either as vault cash or in accounts with the district Federal Reserve Bank Therefore, the reserve requirements ensure that depository institutions maintain a minimum amount of physical funds in their reserves. .

The Federal Funds Rate
The use of open-market operations is the most important tool that used to manipulate monetary policy. The Fed's goal in trading the securities is to affect the federal funds rate - the rate at which banks borrow reserves from each other. The Federal Open Market Committee (FOMC) sets a target for this rate, but not the actual rate itself (because it is determined by the open market). This is what news reports are referring to when they talk about the Fed lowering or raising interest rates.

All banks are subject to reserve requirements, but they frequently fall below requirements in carrying out of day-to-day business. To meet requirements they have to borrow from each other's reserves. This creates a market in reserve funds, with banks borrowing and lending as needed at the federal funds rate. Therefore, the federal funds rate is important because by increasing or decreasing it, over time, the Fed can impact practically every other interest rate charged by U.S. banks.

Remember, the end goals of monetary policy are sustainable economic growth, full employment and stable prices. Through monetary policy, therefore, the Fed attempts to tweak the economy to the right levels.

The FOMC Rate Meeting

So far we've learned about the structure of the Federal Reserve and its duties, the Federal Open Market Committee (FOMC), the tools of monetary policy and the federal funds rate. Now we're going to put it all together to see how the Fed uses the tools at its disposal to influence the economy.

The FOMC Decision
The FOMC typically meets eight times each year. At these meetings, the FOMC members decide whether monetary policy should be changed. Before each meeting, FOMC members receive the "Green Book," which contains the Federal Reserve Board (FRB) staff forecasts of the U.S. economy, the "Blue Book," which presents the Board staff’s monetary policy analysis and the "Beige Book," which includes a discussion of regional economic conditions prepared by each Reserve Bank.

When the FOMC meets, it decides whether to lower, raise or maintain its target for the federal funds rate. The FOMC also decides on the discount rate. The reason we say that the FOMC sets the target for the rate is because the rate is

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actually determined by market forces. The Fed will do its best to influence open-market operations, but many other factors contribute to what the actual rate ends up being. A good example of this phenomenon occurs during the holiday season. At Christmas, consumers have an increased demand for cash, and banks will draw down on their reserves, placing a higher demand on the overnight reserve market; this increases the federal funds rate. So when the media says there is a change in the federal funds rate (in basis points), don't let it confuse you; what they are, in fact, referring to is a change in the Fed's target.
If the FOMC wants to increase economic growth, it will reduce the target fed funds rate. Conversely, if it wants to slow down the economy, it will increase the target rate.

The Fed tries to sustain steady growth, without the economy overheating. When talking about economic growth, extremes are always bad. If the economy is growing too fast, we end up with inflation. If the economy slows down too much, we end up in recession.

Sometimes the FOMC maintains rates at current levels but warns that a possible policy change could occur in the near future. This warning is referred to as the bias. The means that the Fed might think that rates are fine for now, but that there is a considerable threat that economic conditions could warrant a rate change soon. The Fed will issue an easing bias if it thinks the lowering of rates is imminent. Conversely, the Fed will adopt a bias towards tightening if it feels that rates might rise in the future.

Why It Works
If the target rate has been increased, the FOMC sells securities. If the FOMC reduces the target rate, it buys securities.

For example, when the Fed buys securities, it essentially creates new money to do so. This increases the supply of reserves in the market. Think of it this way, if the Fed buys a government security, it issues the seller a check, which the seller deposits in his or her bank. This check is then credited against the bank's reserve requirement. As a result, the bank has a greater supply of reserves, and doesn't need to borrow money overnight in the reserves market. Therefore, federal funds rate is reduced. Of course, when the Fed sells securities, it reduces reserves at the banks of purchasers, which makes it more likely that the bank will engage in overnight borrowing, and increase the federal funds rate.

To put it all together, reducing the target rate means the fed is putting more money into the economy. This makes it cheaper to get a mortgage or buy a car, which helps to boost the economy. Furthermore, interest rates are related, so if banks have to pay less to borrow money themselves, the cost of a loan is reduced.

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Why is Everybody Always Talking About Alan Greenspan?
Many investors have watched Alan Greenspan with the utmost attention. As the former chairman of the Fed, he guided U.S. monetary policy between 1987 and 2006, making him an extremely powerful man. Few had the power to make the markets move like Greenspan. When he spoke, he carried the weight of the Federal Reserve, forcing professional investors to analyze his every word.
He was designated chairman by presidents Reagan, George H.W. Bush, Bill Clinton and President George W. Bush. He was succeeded by Ben Bernanke on February 1, 2006.

Conclusion

The Fed has more power and influence on financial markets than any legislative entity. Its monetary decisions are intensely observed and often lead the way for other countries to take the same policy changes. We hope that this tutorial has helped to shed some light on how the Fed affects the markets.

Let's recap

- The Federal Reserve Board was created to in 1913 to provide the nation with a safer, more flexible and more stable monetary and financial system.
- The Board of Governors of the Federal Reserve heads up the Fed.
- Twelve Regional Federal Reserve Banks are the operating arms of the Fed.
- The Federal Open Market Committee (FOMC) is the policy-making branch of the Federal Reserve.
- The Fed's mandate is "to promote sustainable growth, high levels of employment, stability of prices to help preserve the purchasing power of the dollar and moderate long-term interest rates."
- The Fed serves as the banker's bank, the government's bank, the regulator of financial institutions and as the nation's money manager.
- Monetary policy is influenced through open-market operations, the discount rate and reserve requirements.
- The FOMC sets a target for the federal funds rate and attempts to reach that rate primarily through the use of open market operations.
- The FOMC typically meets eight times per year to make decisions on monetary policy.
- If the FOMC wants to increase economic growth, it will reduce the target federal funds rate (and vice versa).
- If the target rate has been increased, the FOMC sells securities. If the FOMC reduces the target rate, they buy securities.
- Reducing the target rate means that the fed is putting more money into the economy (and vice versa).

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- Chairman of the Fed, Ben Bernanke took over the position from Alan Greenspan on February 1, 2006. Greenspan had held the position since 1987.

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