

Tools for Teaching the Arkansas High School Economics with Personal Finance Course

Session 11:

The Role of the Federal Reserve System and Monetary Policy

Session Description

The Federal Reserve System’s monetary policy works to stabilize and promote the growth of the US economy. This session will provide students with an overview of the Federal Reserve System and its monetary policy.

Standards and Benchmarks (see page 11.7)

Talking Points

The Federal Reserve System (the Fed)

1. The Federal Reserve (Fed) is the central bank of the United States. The US Congress has given the Fed two objectives, called the “dual mandate”—to pursue the economic goals of maximum employment and price stability. In order to move the economy toward achieving this dual mandate, the Fed conducts monetary policy.
2. The Federal Reserve System is comprised of three parts: (1) the Board of Governors, (2) 12 regional Reserve Banks, and (3) the Federal Open Market Committee (FOMC). These parts work together to promote the health of the US economy and the stability of the US financial system.
 - The **Board of Governors** in Washington, DC, is the governing body of the Federal Reserve System. The Board of Governors guides the operation of the Federal Reserve System to promote the goals and fulfill the responsibilities given to the Fed by Congress. The Board of Governors is overseen by seven “governors” who guide all aspects of the operation of the Federal Reserve System.
 - The United States is divided into **12 Federal Reserve Districts**, with a Federal Reserve Bank established in each District. The 12 Reserve Banks examine and supervise financial institutions, lend to depository institutions, and provide US payment system services, among other things. Each Federal Reserve Bank is managed by a president who serves as chief executive officer (CEO), and each president plays a key role as a maker of monetary policy. Federal Reserve Bank presidents contribute to making national monetary policy but also serve as the voice of “Main Street.”
 - The **Federal Open Market Committee (FOMC)** is the body within the Federal Reserve System that determines monetary policy for the country. The FOMC sets monetary policy to promote maximum employment and price stability in the US economy. The Committee includes up to 19 participants—seven Federal Reserve Board governors (if all positions are

filled) and the presidents of the 12 Federal Reserve Banks. Of the 19 FOMC participants, 12 are voting members of the Committee, on a rotating basis. The structure of the FOMC ensures that a diverse set of voices is reflected in the policymaking process.

Monetary Policy

1. Keeping our economy healthy is one of the most important jobs of the Federal Reserve. According to its dual mandate, the Fed must pursue the economic goals of maximum employment and price stability. It does this by conducting and implementing monetary policy.
 - The FOMC *conducts* monetary policy by setting a target for the federal funds rate, which is the Fed's policy rate.
 - The Fed *implements* monetary policy by using its monetary policy tools to steer the federal funds rate into the target range.

Conducting Monetary Policy

2. The FOMC sets a target range for the federal funds rate; it is the range where it wants the federal funds transactions to take place. For example:
 - If the FOMC *lowers* the target range for the federal funds rate, this will lower interest rates in the economy and encourage consumers and businesses to take loans to spend and invest.
 - If the FOMC *raises* the target range for the federal funds rate, this will raise interest rates in the economy and discourage consumers and businesses from taking loans to spend and invest.

Implementing Monetary Policy

3. The Fed has four tools to implement monetary policy. The first three are "administered rates": Interest on Reserve Balances, the Overnight Reserve Repurchase Agreement Facility, and the Discount Rate. The final tool is open market operations.

- **The Fed's Primary Tool: Interest on Reserve Balances**

Today, the Fed's primary tool for adjusting the federal funds rate is interest on reserve balances. The interest on reserve balances rate is the interest rate paid on funds that banks hold in their reserve balance account at a Federal Reserve Bank. For banks, this interest rate represents a risk-free investment option. Importantly, the interest on reserve balances rate is an "administered rate," which means it is set by the Fed and not determined in a market (like the federal funds rate is).

Because the Fed sets the interest on reserve balances rate directly, the Fed can steer the federal funds rate down or up by lowering or raising the level of the interest on reserve balances rate. As a result, interest on reserve balances is the Fed's primary tool for adjusting the federal funds rate, but the Fed has other tools that play supporting roles.

- **Setting a Floor for the Federal Funds Rate: *The Overnight Reverse Repurchase Agreement Facility***

Interest on reserve balances is available only to banks and a few other institutions. The Fed has an overnight reverse repurchase facility that is open to a broader set of financial institutions. This facility allows these financial institutions to deposit their funds at a Federal Reserve Bank and earn the overnight reverse repurchase agreement rate offered by the Fed. The overnight reverse repurchase agreement rate works for these institutions similar to the way the interest on reserve balances rate works for banks. The overnight reverse repurchase agreement facility is a supplementary tool because the rate the Fed sets for it helps set a floor for the federal funds rate.

- **Setting a Ceiling for the Federal Funds Rate: *The Discount Window***

The discount rate is the rate charged by the Fed for loans obtained through the Fed's discount window. Because banks will not likely borrow at a higher rate than they can borrow from the Fed, the discount rate acts as a ceiling for the federal funds rate: It is set higher than the interest on reserve balances rate and the overnight reverse repurchase agreement rate.

- **The Final Tool: *Open Market Operations***

As noted above, the Fed's current method for implementing monetary policy relies on banks' reserves remaining "ample." So, if the Fed needs to add reserves to ensure they remain ample, it does so by buying US government securities in the open market. This action is known as open market operations. When the Fed buys securities, it pays for them by depositing funds into the appropriate banks' reserve balance accounts, adding to the overall level of reserves in the banking system. Prior to 2008, open market operations were the Fed's primary monetary policy tool, which it used daily to make sure the federal funds rate hit the FOMC's target. Today this tool is mainly used to ensure that reserves remain ample.

Now that you understand the Fed's implementation tools, let's see how the Fed uses them to achieve its two goals: maximum employment and price stability.

Expansionary Monetary Policy Using the Fed's Tools

4. Suppose the following: The economy weakens, with employment falling short of maximum employment, and the inflation rate has been steady at around 2 percent but is showing signs of decreasing. The FOMC might decide to *conduct* monetary policy by lowering its target range for the federal funds rate. To *implement* that monetary policy, it would decrease its administered rates—the interest on reserve balances rate, overnight reverse repurchase agreement rate, and discount rate—to ensure the market-determined federal funds rate stays within the target range. These actions would transmit to other interest rates and broader financial conditions:

- Lower interest rates decrease the cost of borrowing money, which encourages consumers to increase spending on goods and services and businesses to invest in new equipment.
- The increase in consumption spending increases the overall demand for goods and services in the economy, which creates an incentive for businesses to increase production, hire more workers, and spend more on other resources.

- As these increases in spending ripple through the economy, likely moving the unemployment rate down toward its full employment level, inflation could possibly move up.

So, the Fed's monetary policy implementation tools can be effective for moving the economy back toward maximum employment and price stability when the economy is stalling.

Contractionary Monetary Policy Using the Fed's Tools

5. Suppose the following: The economy is showing signs of overheating, with the unemployment rate very low and businesses finding it hard to fill jobs, and the inflation rate has been above the Fed's 2 percent target for quite some time and is rising. In this case, the FOMC might decide to *conduct* monetary policy by raising its target range for the federal funds rate. To *implement* that monetary policy, it would increase its administered rates—the interest on reserve balances rate, overnight reverse repurchase agreement rate, and discount rate—to ensure the federal funds rate stays within the target range. These actions would transmit to other interest rates and broader financial conditions:

- Higher interest rates increase the cost of borrowing money and raise the incentive to save, which dampens consumer spending on some goods and services and slows businesses' investment in new equipment.
- The decrease in consumption spending decreases the overall demand for goods and services in the economy, which will likely lead to a decrease in production levels, fewer employees hired, and less spending on other resources.
- As these decreases in spending ripple through the economy, demand for workers could lessen, inflationary pressures would diminish, and the inflation rate would fall back toward 2 percent.

So, higher interest rates can be used to move the economy back to maximum employment and price stability when the economy is overheating.

Resources

NOTE: See p. v for instructions on how to set up an [Econ Lowdown](#) account and assign resources found in the Resource Gallery to your students.

Online Modules

Allow time for students to complete the module:

- The Fed’s New Monetary Policy Tools (40:00)
https://www.econlowdown.org/resource-gallery/monetary_policy_tools

Video Q&A

Allow time for students to view the videos and answer the questions:

- Economic Lowdown Video Series—Monetary Policy, part 1: The Fed and the Dual Mandate (10:00)
<https://www.econlowdown.org/resource-gallery/monetary-policy-part-1-the-fed-and-the-dual-mandate>
- Economic Lowdown Video Series—Monetary Policy, part 2: Two Important Interest Rates in Monetary Policy Implementation (10:00)
<https://www.econlowdown.org/resource-gallery/monetary-policy-part-2-two-important-interest-rates-in-monetary-policy-implementation>
- Economic Lowdown Video Series—Monetary Policy, part 3: Reservation Rate and Arbitrage (10:00)
<https://www.econlowdown.org/resource-gallery/monetary-policy-part-3-reservation-rate-and-arbitrage>
- Economic Lowdown Video Series—Monetary Policy, part 4: The Fed in Action (10:00)
<https://www.econlowdown.org/resource-gallery/monetary-policy-part-4-the-fed-in-action>

Reading Q&A

Allow time for students to read the essays and answer the questions:

- *Page One Economics*®: Independence, Accountability, and the Federal Reserve System
<https://www.econlowdown.org/resource-gallery/independence-accountability-and-the-federal-reserve-system>
- *Page One Economics*®: How Does the Fed Use Its Monetary Policy Tools to Influence the Economy?
<https://www.econlowdown.org/resource-gallery/how-does-the-fed-use-its-monetary-policy-tools-to-influence-the-economy>

Lessons

Allow time for students to complete the lessons:

- Classroom Activity: How Fed Policy Transmits to the Economy
<https://www.stlouisfed.org/education/how-fed-policy-transmits-to-the-economy>
- What Happens When the Federal Reserve Raises Interest Rates?
<https://www.stlouisfed.org/education/what-happens-when-federal-reserve-raises-interest-rates-lesson>
- Lecture Guide: How the Federal Reserve Implements Monetary Policy
<https://www.stlouisfed.org/education/monetary-policy-lecture-guide>

Standards and Benchmarks

Arkansas Economic Standards

Content Standard E.4: Students will understand the growth, stability, and interdependence within a national economy. This includes the current and future state of the economy using economic indicators and monetary and fiscal policies for a variety of economic conditions.

- **E.4.ECON.4:** Compare and contrast the roles and functions of financial institutions in the United States including banking practices* and regulation of savings and investments.
- **E.4.ECON.5:** Examine primary (e.g., ample reserves) and secondary (e.g., discount rate, reserve requirement, interest on reserves) monetary policy tools used by the Federal Reserve System.

