

# Federal Reserve - Lesson Plan

## Overview:

The Federal Reserve System is the formal organization for studying and implementing monetary policy.

## Objectives:

Students will be able to:

- Understand the purpose and functions of the Federal Reserve

## Background and Information:

- The Federal Reserve is the central bank of the U.S.

## Time:

45 Minutes

## Materials:

- iPad
- Gods of Money** app
- Federal Reserve Worksheets

## Educational Goals:

- To develop an increased understanding of how the U.S. economy works.
- To understand how U.S. budget deficits contribute to the federal debt.

## Activity: Revenue

### I. LECTURE *10 minutes*

- Prior to the creation of the Federal Reserve:
  - Markets were often unstable
  - People had little faith in the banking system
- The Federal Reserve was created by the U.S. Congress in 1913.
- The Federal Reserve is often called "The Fed."
- The Fed is an independent entity.
- But the Fed is subject to oversight by Congress.
- The Fed's decisions do not have to be approved by the President or anyone else in government.
- Congress periodically reviews the Fed's activities.
- The Fed is headed by the Board of Governors of the Federal Reserve.
- The Board of Governors consists of 7 people appointed by the President and must be confirmed by the Senate.
- The Board is led by the Chairman.
- There are 12 regional Federal Reserve Banks around the country.

- L. The Fed's mandate is to promote:
  - 1. Sustainable growth
  - 2. High levels of employment
  - 3. Stability of prices
  - 4. Long-term interest rates
- M. The Fed serves as:
  - 1. The banker's bank
  - 2. The government's bank
  - 3. The regulator of financial institutions
  - 4. The nation's money manager
- N. The Fed also includes the Federal Open Market Committee, better known as the FOMC
- O. The Fed has three main tools for influencing the economy:
  - 1. The Federal Funds Target Rate
  - 2. The Banks Reserve Requirement
  - 3. The Fed balance sheet
- P. The Federal Funds Target Rate
  - 1. The Federal Funds Rate is the interest rate at which banks borrow reserves from each other.
  - 2. The FOMC sets the Federal Funds Rate target.
  - 3. The Federal Funds Rate influences the cost of borrowing and lending money throughout the U.S. economy:
    - a) Home loans
    - b) Auto loans
    - c) Personal loans
    - d) Credit card interest rates
  - 4. When the Fed changes the Federal Funds Rate:
    - a) Lowering the rate means the Fed is putting more money into the economy to encourage growth.
      - (1) A lower rate makes it cheaper to buy a house or a car, which encourages spending
    - b) Raising the rate means the Fed is slowing the economy to counteract or prevent inflation.
      - (1) A higher rate makes it more expensive to buy a house or a car, which discourages spending
- Q. The Federal Reserve also sets Bank Reserve Requirements.
  - 1. The bank reserve requirement is the amount of cash a bank must have in reserve compared to its total assets.
  - 2. The reserve requirements influences how much money banks can create through loans.
  - 3. A lower reserve requirement encourages lending and economic growth.
  - 4. A higher reserve requirement discourages lending and slows economic growth.
- R. The Fed also influences the economy by expanding or contracting its balance sheet.
  - 1. Increasing the balance sheet encourages economic growth.
  - 2. Decreasing the balance sheet slows economic growth.
- S. The Fed tries to sustain steady economic growth.

1. If the economy grows too fast, high inflation may result.
  2. If the economy slows too much, a recession may occur.
- T. The Federal Reserve is the U.S.'s central bank.
- U. Every country or economic union, such as the European Union, has a central bank. Some examples:
1. European Central Bank (ECB)
  2. Bank of England
  3. Bank of Japan

## II. DEMONSTRATION *15 minutes*

- A. On the iPad, open the **Gods of Money** app.
- B. Tap 'Start' Gods of Money.
- C. Tap 'Watch' historical data.
- D. Set the Start Date to **Jan 2015**.
- E. Tap 'Start >'.
  - F. When the Budget window appears, close it by tapping the checkmark (in the upper right).
  - G. Pause the app by tapping the date (in the upper right).
- H. In the dashboard, note the Federal Funds Effective Rate.
  1. This is the interest rate paid by banks when they borrow money from the Federal Reserve.
- I. In the control panel, note the controls that deal with the Federal Reserve:
  1. Assets & Liabilities
    - a) This is the Fed's "balance sheet."
    - b) Increasing the Fed's balance sheet encourages economic growth.
    - c) Decreasing the Fed's balance sheet slows economic growth.
    - d) When the Great Recession started in 2008, the Fed grew its balance sheet rapidly to counteract the Great Recession.
  2. Federal Funds Target Rate
    - a) The most important tool in the Fed's toolbox.
    - b) The FOMC sets this interest rate.
    - c) The Federal Funds Target Rate greatly influences the cost of borrowing money. This rate ultimately determines the cost of getting
      - (1) A mortgage to buy a home
      - (2) A loan to buy a car
      - (3) A personal loan, such as a student loan
    - d) When the Great Recession started in 2008, the Fed lowered the Federal Funds Target Rate to near 0% to encourage economic growth, and kept it at nearly 0% for years.
  3. Bank Reserve Requirement
    - a) A higher bank reserve requirement discourages lending and slows economic growth.
    - b) A lower bank reserve requirement encourages lending and economic growth.
    - c) The bank reserve requirement is currently (about) 10%.

**III. IN-CLASS ASSIGNMENT** *20 minutes*

- A. Pass out the **Federal Reserve Worksheets**, one per student.
- B. Have students follow the instructions on the worksheet:
  - 1. Start and run **Gods of Money** to find and record the Assets & Liabilities, Federal Funds Target Rate, Federal Funds Effective Rate, and Bank Reserve Requirement values for 1970 through 2010 at 10-year intervals.
    - a) For Assets & Liabilities, be sure to use consistent dollar units, e.g. billions of dollars.
      - (1) If a value is in trillions, multiply by 1000 to get billions.
      - (2) If a value is in millions, divide by 1000 to get billions.
  - 2. Create 2 line charts for 1970 - 2010 showing:
    - a) Revenue & Expenditures
    - b) Budget Deficit & Federal Debt
  - 3. Use the values to answer the worksheet questions.

**IV. HOMEWORK ASSIGNMENT** *15 minutes*

- A. Assign students to complete the homework assignment on the worksheet.