______________________________________NAME

# Unit 5 - Macroeconomics

## MONETARY POLICY

**Essential Question:** How does the government promote the economic goals of price stability, full employment, and economic growth?

### Role of Money

Money in the United States economy primarily refers to the coins, currency, and checkable (demand) deposits available to consumers and producers to make purchases. This is known as the M1 definition of the money supply which is the definition of money used for the money function “medium of exchange.” When we use money as a medium of exchange, we are using it to facilitate transactions. Households and businesses are willing to accept money as payment for resources and goods because they believe they will be able to use it for purchases in the future. Money can also serve as a store of value. You can sell something, such as your labor, and then save that money to buy something later. Money also functions as a unit of account/standard of value. The role of money as a unit of account/standard of value means money can be used to compare the values of goods and services in relation to each other.

### Explain the roles and functions of money (SSEMA2a):

There are 3 main functions of money.

1. **Medium of Exchange**: something ______________________________ as payment for goods and services. This is the most basic function: it must be accepted.
2. **Store of Value**: allows purchasing power to be _______ until needed in the future.
3. **Standard of Value**: a common denominator that can be ______________________ ________________in terms that most people can understand.

| Describe the last transaction in which you used money as a medium of exchange. | Using money as the standard, explain the value of one hour of your time. | Describe your preferred method of storing the value of your money. |
|---|---|---|
| | | |

**SSEMA2 Explain the role and functions of the Federal Reserve System.**

The Federal Reserve System (*The Fed*) acts to help achieve the economic goals of price stability, full employment, and economic growth. It maintains the currency and the payments system, regulates and supervises banks, protects consumers and encourages financial literacy, acts as the government’s bank, and conducts monetary policy. The Fed controls the size of the money supply through reserve requirements, open market operations, the discount rate, and interest on reserves. Changes to the money supply can also affect inflation. Because of different situations and changing political opinions, economic policies have moved in and out of favor, but we needed all three policies in the Great Recession.

*Highlight the goals of The Fed in the preceding paragraph.*

*What is a simple way to remember the function of The Fed? (acts as . . .)* ______________________________

*What does The Fed control?* ______________________________

## Structure and Responsibilities of *The Fed*

**Board of Governors**

- The Fed is privately owned by member banks and is run by a ______________________________ ______________________________. The Board sets general policy for the Fed.
- 7 members, each serving a 14 year term
- Members are ______________________________ and ______________________________

**Federal Open Market Committee**

- The Federal Open Market Committee (FOMC) is the primary monetary policy arm of the Fed. It has the power to ______________________________.
- The committee has ____________________ and meets 8 times a year
- Makes decisions about the growth of money supply and interest rates

**District Banks**


- There are ____________________ in different regions of the country. District banks provide many of the same functions for banks and depository institutions that banks provide to us.
- District banks accept deposits from and make loans to other banks

**Member Banks**

- Commercial banks that are members of and hold stock in the Fed bank in their district.

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- The Fed is also responsible for the money supply, for regulating banks, for preparing certain consumer legislation, and serves as the federal government's bank.
- The Fed determines how much currency is in circulation, and the Bureau of the Mint makes new bills and coins.
- The Fed controls the payment system, which controls the electronic transfer of funds. It is also the clearinghouse for all checks written in the United States.
- The Fed makes sure that all banks operate in accordance with banking laws and regulations.
- The Fed provides some guidance for consumers, and oversees certain consumer related issues, such as mortgages and foreclosures.
- The Fed raises money for the federal government by selling bonds and other securities that have the backing of the faith and credit of the U.S. government.

______________________________________NAME

aka:

**3 Key Entities**

**5 Key Functions**

The Fed is led by a seven-member ______________________________ who are appointed by the ________________ and approved by the ______________________.

Which of the entities of the Fed is the primary arm for conducting monetary policy?

A. The Board of Governors
B. The Federal Open Market Committee (FOMC)
C. The District Banks
D. The Member Banks.

Which of the following would **not** be a part of the money supply?

A. coins and paper currency
B. an investment in a corporate stock
C. checking account deposits
D. a deposit in a savings account

When you make a deposit in your savings account, which of the following are true?

A. your money functions as a medium of exchange
B. your money functions as a unit of accounting
C. your money functions as a store of value
D. your money functions as a standard of value

What are Congress's two tools for conducting fiscal policy?

A. borrowing money and spending money
B. taxes and government spending
C. price ceilings and price floors
D. tariffs and subsidies

# Monetary Policy

The most important role of the Federal Reserve is in ______________________________________________—

the total amount of money in an economy. By controlling the money supply, the Fed _______________________

____________________________________, and the _________________________________.

**Monetary Policy**: the expansion or contraction of the money supply _____________________________________

_______________________________, which is the interest. The Fed controls the money supply to create greater stability within the economy. Its goal is to promote economic growth, full employment, and price level stability. This means GDP is growing, unemployment is low and inflation is low.

- Easy Money Policy: the Fed allows the money supply to _________________ and interest rates to fall, which normally stimulates the economy. This policy is used when the economy is in a _______________________.
  AKA: _________________________________________________________
- Tight Money Policy: the Fed ________________ the money supply, which increases interest rates and slows the economy down. This policy is used when the economy is experiencing ________________________.
  AKA: _________________________________________________________

**Fractional Reserve System**: a system that requires banks and other depository institutions __________________ __________________________________________________ in the form of legal reserves.

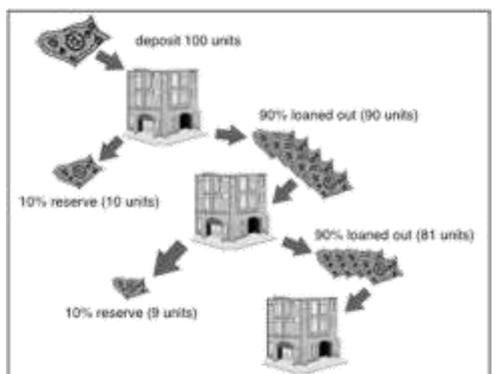
**The Multiplier Effect**


| Initial Deposit: $1000 | | Reserve Requirement: 15% | |
|---|---|---|---|
| Year | Deposit | Reserves | Loan Amount |
| 1 | $1,000 | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| Total | | | |

**Reserve Requirement**: a rule stating that a percentage of every customer deposit be set aside as legal reserves.

A customer deposits of $100 with a reserve requirement of 10%. The bank must set aside $10 as a __________________________ and then may loan the remaining $90, which is called _____________________. It is logical to assume the bank will want to loan that money because

________________________________________________________.



Banks artificially create money in the economy by making loans based on fractional reserve banking. In this example, what started out as 100 units of money deposited becomes 171 units of money loaned.

The fractional reserve system will allow the money supply to grow to several times the size of the excess reserves the banking system keeps. Fred deposits $1,000 in a bank with a reserve requirement of 20%.

- How much will the money supply expand? $1,000 ÷ .20 = $_______ (money supply)

# Monetary Policy Review

<u>Monetary Policy</u> is controlled by the FED and controls/regulates the banking system of the United States. It has nothing to do with taxing and spending. For each of the situations listed below, decide if you would use Easy-Money policy, Tight-Money policy, or do nothing.

1. If you use <u>Easy-Money policy</u> (*expansionary monetary policy*), you are trying to grow the economy and create more jobs by increasing the money supply. In reality, the FED would do this by lowering the reserve requirement, buying government bonds and securities through open market operations, and/or lowering the discount rate.
2. If you use <u>Tight-Money policy</u> (*contractionary monetary policy*), you are trying to slow the economy down to fight inflation or prevent the economy from overheating and collapsing. The FED would do this by reducing the money supply. Money can be sucked out of the economy by raising the reserve requirement, selling government bonds and securities through open market operations, and/or raising the discount rate.
3. <u>Doing nothing</u> -- the economy is perfect so we will do nothing OR it is hard to determine the right course.


**Questions:**

1. GDP dipped from 3 percent to 1 percent in the last year. ___________
2. The CPI has risen 3 percent in the last six months. ________________
3. Commercial interest rates are rising, but the FED has not raised rates.

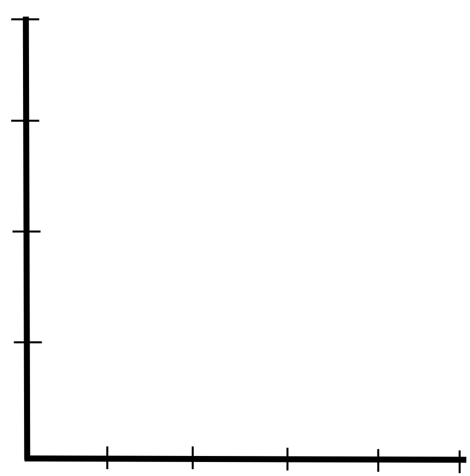
   ____________________
4. The prices of cars have tripled in the last year. _______________
5. GDP is growing steadily, and prices are rising sharply. ______________
6. The CPI is up, and housing starts are at a fifteen-year high. ________________
7. We are in a recession. Factory orders are down, and the economy appears to be slumping. ____________
8. Consumers feel worried, inflation is low and spending is sluggish. _____________
9. Unemployment is low and prices are rising steadily. _______________
10. Jobless rates are pushing 11 percent; CPI has fallen from 8 percent to 2 percent growth. _____________
11. The money supply appears to be tight, and prices are on the rise. __________________
12. Prices are stable, and the GDP is growing at a 3 percent pace. _________________

***<u>EOC QUICK REVIEW</u>***

Define Opportunity Cost: ______________________________________________________________________

_____________________________________________________________________________________________

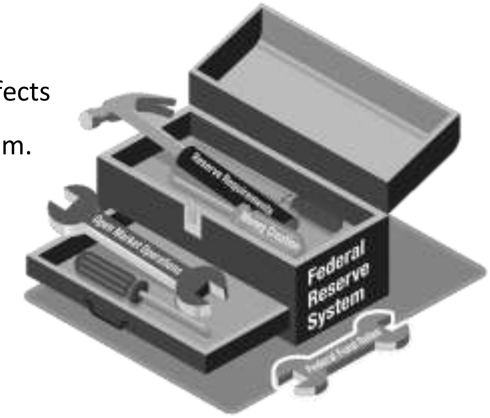
| | **Production Alternative** | | | | |
|---|---|---|---|---|---|
| **Types of Production** | **A** | **B** | **C** | **D** | **E** |
| Military Goods | 0 | 5 | 9 | 13 | 17 |
| Consumer Goods | 50 | 40 | 30 | 20 | 0 |



1) Draw a production possibilities curve for Military Goods and Consumer Goods the data above.
2) Label the points where the economy would be efficient (X), underutilized (Y) and unattainable (Z).
3) What is the opportunity cost of moving from point A to point B? _____________
4) What is the opportunity cost of moving from point B to point D? _____________
5) What is the opportunity cost of moving from point E to point C? _____________

## Unit 5 - Macroeconomics

# Tools of The Fed




The Fed has 3 main tools it uses to conduct monetary policy. Each tool affects the amount of ________________________________ in the banking system.

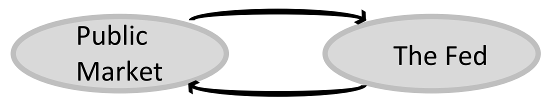
1. **Reserve Requirement**: the amount that banks must set aside for every dollar deposited.

   Lowering the RR will ________________ the money supply.

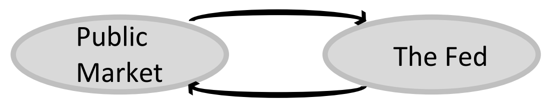
   Raising the RR will ________________ the money supply.

2. **Open Market Operations**: Open market operations involve the Fed's _____________________ of government securities in financial markets. The FOMC determines whether to buy or sell these securities, depending on economic conditions. This is ______________________________ of monetary policy.

   When the Fed buys bonds, the money supply ________________.



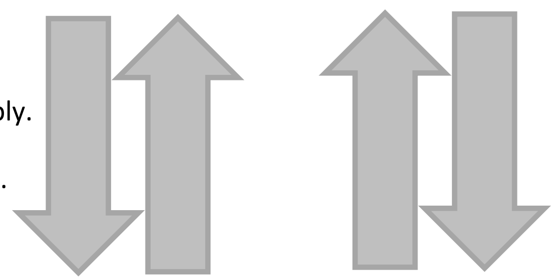

   When the Fed sells bonds, the money supply ________________.




3. **Discount Rate**: The discount rate is <u>the interest rate the Fed charges</u> on loans to other financial institutions. Only financial banks can borrow from the Fed.

   Lowering the discount rate will ________________ the money supply.

   Raising the discount rate will ________________ the money supply.



*Based on the information above, complete the chart below:*

| **Problem** | **Solution** | | |
|---|---|---|---|
| | Open Market Operations | Reserve Requirement | Discount Rate |
| Inflation | | | |
| Recession and High Unemployment | | | |

Which of The Fed's tools is used the most often? ________________________________________________

4. **Interest on Required and Excess Reserves**: The Federal Reserve pays interest on the required reserves as well as the excess reserves of financial institutions. These financial institutions must determine whether they can earn more profit by loaning this money out to customers or by earning interest from the Fed by keeping the excess reserves. If the Fed changes the amount of interest earned on reserves it changes the incentives for institutions to keep or to loan out the money.

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## Practice Test

1. How many District Banks are in the Federal Reserve System? ___________________

2. Federal Reserve Board of Governors members are appointed by the ____________ and confirmed by the ____________.

3. Federal Reserve Board of Governors members serve _______ year terms to help insulate them from political influence.

4. When money is used to compare the value of a two different goods, it serves as a:

   A. medium of exchange
   B. store of value
   C. measure of purchase
   D. unit of accounting

5. Which of the following is not one of the functions of the Federal Reserve?

   A. Performing banking functions for private banks
   B. Issuing Treasury bills and bonds
   C. Regulating banks
   D. Conducting monetary policy.

6. What do Fed member banks do with customer deposits?

   A. They use them to conduct monetary policy.
   B. They use them to enforce wage-price controls.
   C. They keep a portion as legal reserves and loan out a portion at interest.
   D. They use a portion to calculate interest rates and keep a portion as legal reserves.

7. What are the Fed's four main tools for conducting monetary policy?

   A. the reserve requirement, open market operations, and the discount rate, and interest on reserves
   B. expansionary money policy, contractionary money policy, the discount rate, and the quantity theory of money
   C. easy money policy, tight money policy, and the quantity theory of money
   D. the reserve requirement, open market operations, wage-price controls, and corporate subsidies

8. An open market purchase by the Fed

   A. decreases bank reserves, loans, and deposits, and thus increases the money supply.
   B. decreases bank reserves, loans, and deposits, and thus decreases the money supply.
   C. increases bank reserves, loans, and deposits, and thus increases the money supply.
   D. increases bank reserves, loans, and deposits, and thus decreases the money supply.

9. Suppose the Fed buys $15 million worth of government bonds from SunTrust bank. Which of the following is SunTrust Bank most likely to do?

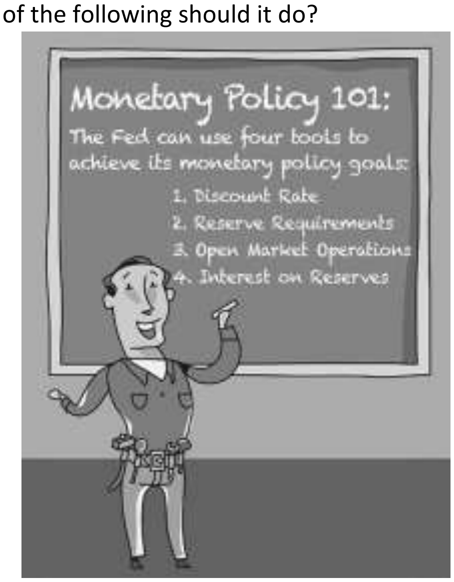
   A. Reduce it's outstanding loans by $15 million.
   B. Borrow more reserves at the "discount window"
   C. Borrow more reserves from other banks.
   D. Make new loans totaling about $15 million.

10. Which of the following is not one of the Fed's monetary policy tools?

    A. Buying bonds or selling bonds on the open market
    B. Raising or lowering the discount rate
    C. Raising or lowering taxes
    D. Raising or lowering the reserve requirement ratio

11. Suppose the Fed wanted to engage in an expansionary monetary policy. Which of the following should it do?

    A. Sell bonds on the open market.
    B. Increase the reserve requirement ratio.
    C. Increase the discount rate.
    D. Buy bonds on the open market.
    E. Lower taxes.




12. Monetary policy refers to what the Federal Reserve does to influence the amount of __________ and __________ in the U.S. economy.

    A. Interest and debt
    B. Currency and gold reserves
    C. Money and credit
    D. Taxes and revenue

13. The goals of monetary policy do NOT include the promotion of _________________.

    A. Maximum employment
    B. Stable prices
    C. Moderate long-term interest rates
    D. Low taxes

14. Which of the following best describes the sequence of events in the conduct of contractionary monetary policy using open market operations (in an economy with low inflation and a stable banking system)?
   A. The Fed raises the interest rate, which leads to a decrease in intended investment spending and a decrease in the supply of federal funds, which decreases aggregate demand and output.
   B. The Fed decreases intended investment spending, which leads to a decrease in aggregate demand and output, and a decrease in the supply of federal funds and the interest rate.
   C. The Fed sells bonds, which decreases the supply of federal funds, which raises the interest rate, which leads to a decrease in intended investment spending, aggregate demand and output.
   D. The Fed buys bonds, which increases the supply of federal funds, which lowers the interest rate, and leads to a decrease in intended investment spending and aggregate demand and output.
   E. The Fed lowers the interest rate, which leads to an increase in intended investment spending and an increase in the supply of federal funds, which decreases aggregate demand and output.

15. Which of the following statements is FALSE about the monetary tools of the Federal Reserve?
   A. They include changing tariffs on imported goods.
   B. They include changing the discount rate.
   C. They include changing the reserve ratio.
   D. They include buying treasury securities.

16. What happens if the Federal Reserve sells a large amount of government securities in the open market?
   A. The total amount of loans in the banking system will increase.
   B. Interest rates will decrease.
   C. The total amount of loans in the banking system will decrease.
   D. The money supply will increase.

17. If the Federal Reserve wanted to stimulate the U.S. economy and reduce unemployment, it would
   A. cause interest rates to decrease because low interest rates encourage business growth and expansion.
   B. cause interest rates to rise because high interest rates encourage business growth and expansion.
   C. increase the discount rate it charges banks, which would increase the money supply.
   D. increase consumer spending by reducing the money supply.

18. Choose three (3) of the following which could be used to promote recovery during a recession.
   A. The Fed buys securities in the Open Market.
   B. Congress increases spending on military and social programs.
   C. Congress increases the income tax rate at all income brackets.
   D. The Fed lowers the discount rate.
   E. The Fed increases the reserve requirement.
   F. Congress raises the corporate tax rate.

19. The calculation of GDP would directly include
   A. the price of the steel used to build a new hotel.
   B. A dinner at Applebee´s.
   C. the income of a person who pays rent by babysitting for the homeowner´s children.
   D. the sale of a 25−year−old house.

20. When Congress increases spending, what is the expected effect on the economy?
   A. Price level decreases, unemployment declines, and the GDP increases.
   B. Price level increases, unemployment declines, and the GDP increases.
   C. Price level decreases, unemployment rises, and the GDP decreases.
   D. Price level increases, unemployment rises, and the GDP decreases.