

Topic 15 – Money and Banking

I. Money

1. Definition

Money is any asset that is regularly used as a _____ .

2. Functions of Money

- Medium of Exchange

- Unit of Account

- Store of Value

Commodity Money vs. Fiat Money

3. How Much Money Exists in the Economy?

Liquidity: The ease with which an asset can be converted into an economy's primary

_____ .

More Liquid

Less Liquid



Measuring the Money Supply:

M1

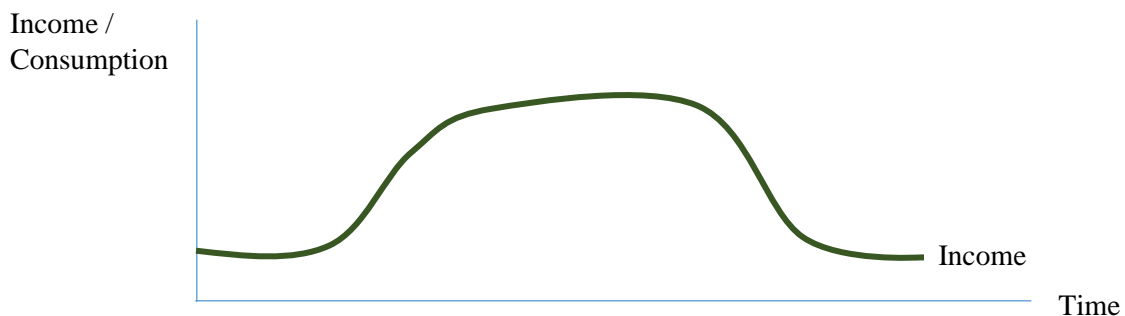
M2

M3...

II. Banking

Big Question – How does the Financial System Work?

1. Watch the video “Saving and Borrowing” and draw a lifetime consumption path on the graph below.

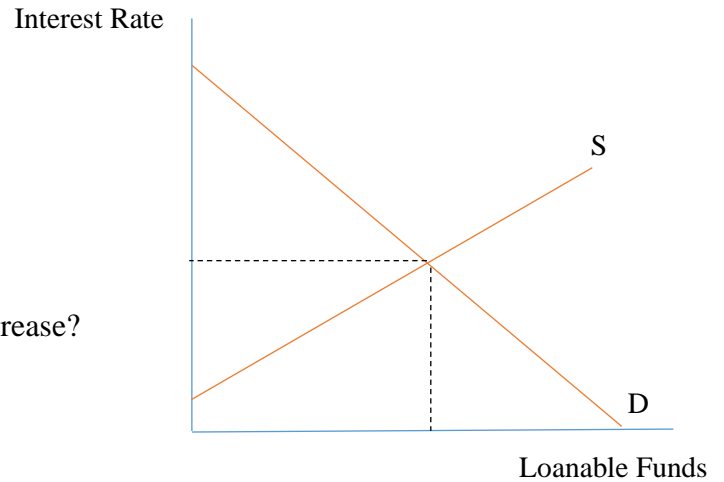


2. Market for Loanable Funds

Who Supplies Loanable funds?

Who Demands Loanable funds?

What do you expect to happen to interest rates in the short-run as college attendance rates increase?



3. Watch the Video “What do Banks do?”

Fractional Reserve Banking System:

Banks hold _____ of deposits in reserve, loaning out rest.

4. The Federal Reserve Bank

Example: Suppose you printed up \$1,000 in new currency in your basement and deposit it in the bank. If the reserve ratio is 10%, how much new money will be created as a result?

Deposits:

Reserves:

Loanable Funds:

New Money =

$$\text{Money Multiplier} = \frac{1}{rr}$$

$$\Delta MS = MM \cdot \Delta \text{Deposits}$$

Example: Suppose your friend decided it would be cool to burn some money. (This is illegal.) She sets a \$100 bill on fire. If the reserve ratio is 5%, how much money will be destroyed as a result?

VI. What Determines the Value of Money?

1. A Brief History of the International Monetary System

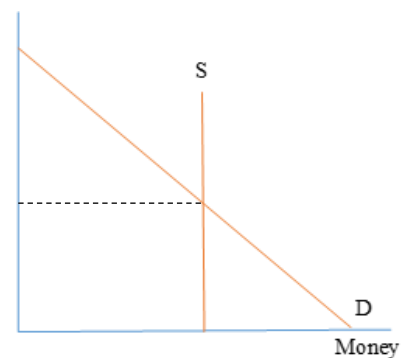
Gold Standard:

Bretton Woods System:

Today's System:

2. Money Supply and Money Demand

Supply of Money



Demand for Money

What shifts Money Demand?

-
-
-

3. Watch the videos about how the Federal Reserve operates.

Before the Great Recession

- What is the Federal Funds Rate?

- Expansionary Open Market Operations
Fed will buy treasury bonds leading to a(n) _____ in the money supply, and a(n) _____ in the federal funds rate.

- Contractionary Open Market Operations
Fed will sell treasury bonds leading to a(n) _____ in the money supply, and a(n) _____ in the federal funds rate.

After the Great Recession

- Quantitative Easing (or Tightening)
Fed buys (or sells) assets other than t-bills. Such as...

- Paying Interest on Bank Reserves
*The quantity of excess reserves held by banks has _____ since 2008.
 Raising the interest rate on reserves would lead to a(n) _____ in reserves, and thus a(n) _____ in the money supply. This is an example of contractionary monetary policy.*

- Repurchase and Reverse Repurchase Agreements
Similar to OMOs, but short-term and available to a broader range of financial institutions.

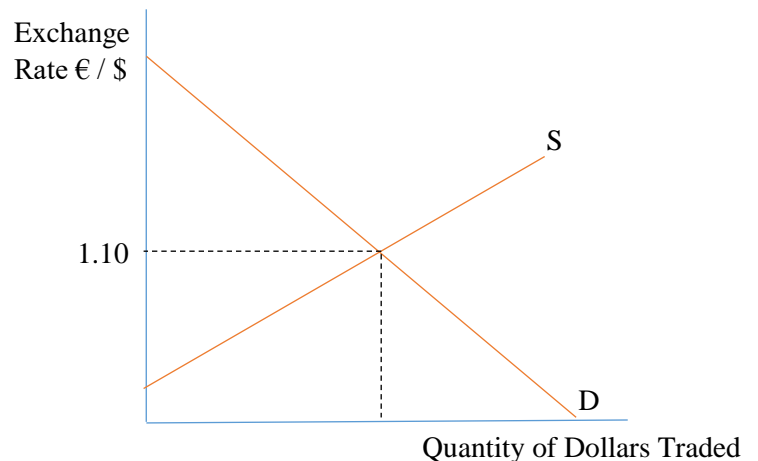
VII. Exchange Rates

Floating Exchange Rates

Sources of Demand for US Currency

-
-
-

Currency Appreciation vs. Depreciation



VIII. Inflation

1. Watch the video “Quantity Theory of Money” and write down what each of the following variables stands for.

$$M \times V = P \times Y$$

2. Watch the video “Causes of Inflation”.

Changes in the average price level are caused by changes in _____.

3. Short-Term Costs of Inflation

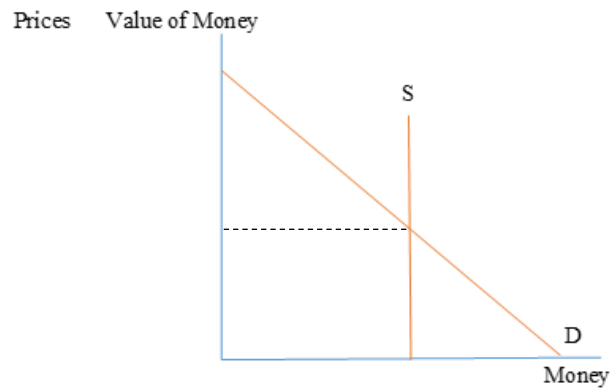
- i. Shoe Leather Costs
- ii. Menu Costs
- iii. Tax Distortions
- iv. Confusion / Relative Price Variability
- v. Redistribution of wealth between savers and borrowers

Watch “What is the Real Interest Rate?”

$$\text{Nominal Interest Rate} = \text{_____} + \text{_____}$$

IX. Hyperinflation

1. Definition: Inflation rates exceeding _____.
2. Cause



3. Example: Venezuela
 Watch the video “Venezuela Crisis: the view from Caracas farmers market”

VI. Assignments

1. Video Assignment and Problem Set 15 due on 4/24/20