Money and Banking
Unit IV

"To understand how monetary policy works, students must understand the definitions of both the money supply and money demand and the factors that affect each of them.
Here the course introduces students to the definition of money and other financial assets such as bonds and stocks, the time value of money, measures of the money supply, fractional reserve banking, and the Federal Reserve System. In presenting the money supply, it is important to introduce the process of multiple-deposit expansion and money creation using T-accounts, and the use of the money multiplier. In learning about monetary policy, it is important to define money demand and examine its determinants. Having completed the study of money supply and money demand, the course should proceed to investigate how equilibrium in the money market determines the equilibrium interest rate, how the investment demand curve provides the link between changes in the interest rate and changes in aggregate demand, and how changes in aggregate demand affect real output and price level. Students should have an understanding of financial markets and the working of the loanable funds market in determining the real interest rate. It is also important that students develop a clear understanding of the differences between the money market and the loanable funds market.

Having an understanding of the financial markets, students should identify and examine the tools of central bank policy and their impact on the money supply and interest rate. Students should understand the distinction between nominal and real interest rate. Students should also be introduced to the quantity theory of money, and examine and understand the effect of monetary policy on real output growth and inflation."

(http://apcentral.collegeboard.com/apc/public/repository/ap08_economics_coursedesc.pdf)

IV. Financial Sector (15-20%)

A. Money, Banking, and Financial Markets
1. Definition of financial assets: money, stocks, bonds
2. Time value of money (present and future value)
3. Measurements of money supply
4. Banks and creation of money
5. Money demand
6. Money market
7. Loanable funds market

B. Central Bank and Control of the Money Supply
1. Tools of central bank policy
2. Quantity theory of money
3. Real versus nominal interest rates

Krugman textbook Modules

Topic 1: Money and Banking	Modules 22-26
Topic 2: Money Creation & Monetary Policy	Modules 25, 26, 27
Topic 3: Financial Economics	Modules 28-29

Topic 1: Money and Banking

Krugman Modules 22, 23, 24, 25, 26

Objectives

1. Analyze the relationship between savings and investment spending
2. identify the purpose of the four principal types of financial assets: stocks, bonds, loans, and bank deposits
3. List and explain the three functions of money.
4. Define the money supply M1 and near-monies M2.
5. State the reasons why currency and checkable deposits are money and why they have value.
6. Explain the relationship between the purchasing power of money and the amount of money in circulation.
7. Describe the structure of the U.S. banking system.
8. Explain why Federal Reserve Banks are central, quasi-public, and bankers' banks.
9. Describe seven functions of the Federal Reserve System and point out which role is the most important.
10. Summarize and evaluate the arguments for and against the Federal Reserve System remaining an independent institution.

Key Terms

Savings = Investment Spending
Wealth
Bonds
Liquidity
Currency
Central Bank
Electronic Payments
Barter
FOMC
Capital Inflows and Outflows
Assets (financial & physical)
Stocks
M1 and M2
Federal Reserve System "the Fed"
Quasi-public banks
Money
Discount Rate
Open Market Operation (OMO)

Key Conceptual Questions:

1. Analyze why Savings = Investment Spending
2. Define the relationship between foreign trade and inflows/outflows
3. Define money
4. Define M1 and M2
5. Describe the different types of financial institutions
6. Describe the organizational structure of the Fed and the functions of each part

Topic 2: Money Creation & Monetary Policy

Krugman Modules 25, 26, 27

Objectives

1. Understand that the American banking system relies upon a fractional reserve.
2. Explain the effects of a currency deposit in a checking account on the composition and size of the money supply.
3. Compute a bank's required and excess reserves when you are given its simplified balance-sheet figures.
4. Explain why a commercial bank is required to maintain a reserve and why it isn't sufficient to cover deposits.
5. Describe what happens to the money supply when a commercial bank makes a loan or buys securities.
6. Describe what happens to the money supply when a loan is repaid or a bank sells its securities.
7. Explain what happens to a commercial bank's reserves and checkable deposits after it has made a loan.
8. Describe how a check drawn on one commercial bank and deposited in another will affect the reserves and excess reserves in each bank after the check clears.
9. Describe what would happen to a single bank's reserves if it made loans that exceeded its excess reserves.
10. Explain how it is possible for the banking system to create an amount of money that is a multiple of its excess reserves when no single bank ever creates money greater than its excess reserves.
11. Compute the size of the monetary multiplier and the money-creating potential of the banking system when provided with appropriate data.
12. Explain that the money multiplier process can also lead to multiple *destruction* of money.

Key Terms

Fractional Reserve Banking
Assets
Actual Reserves
Excess Reserves
Federal Funds Rate
Money Multiplier
Balance Sheet
Liabilities
Required Reserves
Money Creation
Reserve Ratio

Key Conceptual Questions

1. Calculate the amount of reserves a bank must hold
2. Calculate a bank's excess reserves
3. Explain how loans made by the banking system create money
4. Define and calculate the deposit multiplier and use it to compute the change in deposits that results from a change in reserves
5. Explain how changes in the required reserve ratio and the discount rate affect the quantity of money

Topic 3: Financial Economics: Money & Loanable Funds Market

Krugman Module 28, 29

Objectives

1. Identify what the money demand curve is
2. Understand what causes shifts in the money demand curve
3. Analyze why the liquidity preference model determines the interest rate in the short-run
4. Understand how the loanable funds market matches savers and investors
5. Analyze the determinants of supply and demand in the loanable funds market
6. How to reconcile the interest rates of the two models (money market and loanable funds market)

Key Terms

Short-term interest rates
Money Demand
Liquidity preference model
Rate of return
Fisher effect

Long-term interest rates
Money Supply
Loanable funds market
Crowding out effect