Chapter 2 -- Money, Money Supply, and Interest

NEW CONCEPTS INTRODUCED

- Money
- Dollarization
- Legal Tender
- Medium of Exchange
- Double coincidence of wants
- Unit of Account
- Store of Value
- Commodity money
- Fiat Money
- Monetary aggregates
- M1, Money Market Mutual Funds, and Disintermediation
- Time Value of Money
- Time Preference
- Compound interest
- Future Value

CHAPTER OUTLINE AND TEACHING HINTS

2-1 The Concept of Money
2-1a Money Defined

Stress these specific points:
a. Anything that performs the function of money is MONEY.
b. Money is something that people "generally accept" in exchange for goods and services.
c. Dollarization – where a country legally accepts another country's currency as their legal tender)
d. Legal Tender: Assets accepted for repayment of debt to the government as well as private transactions.

2-1b Functions of Money

- Medium of Exchange
  - Double coincidence of wants
- Unit of Account
- Store of Value

Stress these specific points:
a. For any asset to function as money it must perform three very important functions:
   - Medium of Exchange: usable for buying and selling goods and services. A pizza shop worker does not want to pay 100 pizzas per week. Nor does the pizza shop owner want to receive, say, ears of corn in exchange for pizza.

- Unit of Account: Society uses monetary units – dollars, as a yardstick for measuring the relative worth of a wide variety of goods, services, and resources.
- Store of Value: transferring purchasing power from the present to the future. People do not spend all of their incomes on the day they receive them. To buy things later, they store some of their wealth as money.

- Double coincidence of wants: Without money, we would have to rely on bartering. Finding someone who has what they want and also wants what they have.

Section 2-1 Review Questions & Answers

Q1) What is the difference between money and currency? When are they the same? Why might they be different?

SUGGESTED ANSWER: Money is anything generally accepted in exchange for goods & services. Currency is issued by a bank or the government, but but currency is not necessarily money. They are the same when they are accepted in exchange for goods and services. Currencies can stop being money if people don't accept them in exchange for goods and services. If a group of people stop using currency to get goods and services but instead use bananas, then the bananas are the money.

Q2) How many prices must a barter economy have if the economy has four goods? What if it has 400 goods? Explain why having a money in the second case is beneficial.

SUGGESTED ANSWER:4 goods = 6 prices; 400 goods = 79,800 prices. Money allows us to specialize and reduce our search cost. Money allows us to reduce the number of stated prices we need.

Q3) You read a news story about a country that is suffering from rapid, ongoing increases in the cost of living. Which characteristic of money is being directly negatively impacted in that economy?

a. Unit of account
b. Medium of exchange
c. Store of value
d. Double coincidence of wants
e.

2-2 Amount of Money and Money Through Time
2-2a The Amount of Money Matters

Stress these specific points:

The amount of money vs the functions as money. If the money supply increases too quickly you have too much money chasing too few goods. Thus, the general level of prices increases that is inflation occurs. If the money supply does not increase fast enough, there may not be enough money for transactions to take place. Fewer transactions, means output decreases and the economy contracts.

2-2b Money Through Time

- Cigarettes in Prison – function as money.
  - Standardized
  - Easily divisible
  - Portable
- Cigarettes in Prison - also commodity Money
  - Challenges with Commodity Money – getting the amounts just right
  - 2 of the most widely used types of commodity money
    - Gold
    - Silver

Stress these specific points:

- Commodity money is an asset that is used as money but also has another, or different, use. It must be easily standardized; it must be easily divisible; it must be easy to carry around. It must be physically durable. It must be in broad demand so one can exchange it for some other good. Cigarettes in Prison – functioned as commodity money in prisons. SEE, standardized, easily divisible, easy to carry around, physically durable.

Section 2-2 Review Questions & Answers

Q1) Bobby is confused. He states: "Since prisoners are not allowed to smoke in prisons any longer, Radford's examples of cigarettes in POW camps no longer applies." How would you explain to Bobby how Radford's story demonstrates the concepts of the criteria of money, as well as the importance of changes in the money supply?

SUGGESTED ANSWER: Any asset that is able to be standardized, divisible, durable and in demand could be currency, as long as it is a medium of exchange, is a unit of value and has store of value. Cigarettes were money.

Q2) Proponents of the Gold Standard, or using gold as money, often argue that it will keep inflation under control. How does the experience of Europe in the sixteenth century raise doubts about that claim?

SUGGESTED ANSWER: If people start to hoard gold or silver, there may not be enough money, an economy could slide into recession. If gold or silver increases too rapidly the economy could suffer inflation.

Q3) Ricardo and Friedman agree that if the money supply increases "too quickly" the following happens:

a. The rate of inflation decreases.
b. The rate of real economic growth increases.
c. The rate of inflation increases.
d. The level of employment decreases.

2-3 Money Supplies

2-3a Monetary Aggregates

- M-1
- M-2

Stress these specific points:

Monetary Aggregates: Money Definition M1; The narrowest definition of the U.S. money supply. It consists of two components: Currency (coins and paper money) All checkable deposits (all deposits in commercial banks and "thrift" or savings institutions on which checks can be drawn) M1 = Currency + checkable deposits - Money Definition M2; A second and broader definition of money includes M1 plus several near-monies. The M2 definition of money includes three categories of near-monies. Savings deposits, including money market deposit accounts. Small-denominated (less than $100,000) time deposits.

Section 2-3 Review Questions & Answers

Q1) A critic of money economics once stated, "if you cannot measure the money supply accurately, it is not worth discussing at all." How would you refute this statement?

SUGGESTED ANSWER: Due to changes in financial markets –financial innovation and changes in the way banks operate – that led to the decline in the usefulness of M2 as a monetary aggregate

Q2) Economists are searching for a "good" measurement of the money supply. What constitutes a good measurement of the money supply?

SUGGESTED ANSWER:M1 & M2 see page 15, For many decades M1 worked fairly well

Q3) Which of the following is the most broad or most inclusive measurement of the money supply?

a. M1
b. M2
c. M3
d. M0

2-4 The Price of Money: Interest Rates
2-4a Time Value of Money
2-4b Present Value

Stress these specific points:

The Price of Money: Interest Rates. Why do interest rates exist? Time Value of Money. People would prefer to consume today as opposed to in the future because life is uncertain. People don't like putting off consumption until tomorrow because they do not know what the future holds. Time preference, the preference to consume now as opposed to in the future. When I ask you to defer your consumption to the future (something you do not want to do), I have to compensate you. That is called interest. The higher your rate of time preference, the higher the rate of interest I must pay you to defer your consumption. Because people have a time preference, money and the ability to consume now has more value than money in the future.

Section 2-4 Review Questions & Answers

Q1) Each person might have a different time preference. Explain why an older person might have a higher or lower time preference than a young person.

SUGGESTED ANSWER: An older person might have a high time preference, consumer now vs. in the future. The older person while they have the ability to consume now has more value than money in the future.

Q2) What is the future value of $500 in two years if the interest rate is 4%? How would you explain this to someone who has no training in economics?
SUGGESTED ANSWER:$500(1.04)^2 = \$540.80$

Q3) If the annual interest rate is 2%, what is the quarterly interest rate?

a. 0.0204
b. 0.0166
c. 0.005
d. 0.001

2-5 Conclusion
In the News: Europe's Banks are too Feeble to Spur Growth