Practice Questions 1 - Econ 136 - Fall 2002

Review Questions

1. Historically speaking, why does monetary exchange—as opposed to barter—tend to grow hand in hand with specialization and the division of labor? Explain using the ideas of “double coincidence of want,” “absence of trust,” and “quid pro quo.”

2. What’s the definition of M1, that is, the (narrow) money supply?

3. Distinguish between a medium of exchange and a means of final payment. Why does credit exchange require some trust, while monetary exchange does not?

4. Using circles of exchange, illustrate (i) barter exchange, (ii) monetary exchange, (iii) credit exchange, and (iv) getting a loan. Which of the four involves a purely financial transaction? Which involves a purely real transaction? In what sense are (ii) and (iii) similar; in what sense are they different? In what sense is getting a loan similar to “getting some liquidity.”

5. What’s the difference between trade credit and consumer credit?

6. Explain the idea of “money sitting” and “money on the wing”; illustrate your answer using circles of (monetary) exchange. Using the idea of convenience in timing one’s transactions, please explain why money’s velocity is not very, very large like that of a “hot potato.”

7. Often a flow (minus any leakage) measures the change in a corresponding stock. If the flow is investment, what is the corresponding stock called and what is the leakage called? If the flow is saving, what is the corresponding stock called and what is one example of a leakage? Illustrate your answers using barrel diagrams.

8. Mr. Keynes gave 3 reasons why people hold money; briefly explain each of them. What is meant by ”transaction balances” or “active balances”? What is meant by “asset balances” or “idle balances”?

9. What is the opportunity cost of holding money? What is short-term cash management (STCM)? Why will a typical household be much more casual about STCM than a typical firm?

10. Why does V↑ when STCM goes up?

11. Give the textbook Keynesian reason why the LM curve slopes upward, based on the relation between r and STCM. Why does the textbook rationale for an upward sloping LM curve lead one to believe that the LM curve is probably very steep?

Exercises

1. Calculate annual velocity for the U.S. economy in 1989. Nominal income (X) in 1989 was $5,233 billion, while the narrow money supply (M1) was $798 billion. Also calculate monthly velocity.

2. The opportunity cost of holding money Suppose an individual spends $500 continuously each month on consumer goods.

   a. No STCM First assume he does no short-term cash management. Illustrate his transaction balances through time using a saw-tooth diagram. What are his average transaction balances? If the money held in his checking account pays no interest, while the money in his savings account pays interest \( r = \frac{1}{2} \) % per month (so 6% a year), how much interest does he lose each month keeping his transaction balances in his checking account? Is it a lot of money?

   b. Some STCM Now suppose the individual does 2 short-term cash management transactions each month.\(^1\) Re-do part a. for this scenario. How much interest does he earn each month from short-term cash management?

3. Suppose on the Island Economy, the nominal monthly flows (in millions of dollars) are as follows: \( C = 1000m, S = 400m, I = 400m, G = T = 600m \). What does nominal income (X) equal each month? Illustrate the monthly flows in a circular flow diagram. Check that all three national income accounting identities (NII) are satisfied by your diagram.

\(^1\)So he deposits $250 into his saving account at the beginning of the month and withdraws this amount in the middle of the month.
4. Continue to assume the monthly flows are as above, and now also assume there is only monetary exchange on the island via checks, and households hold Asset Balances = 500m. Until part d, also assume there is no STCM.

a. Trace the payments between sectors on the island through a typical month using the island’s Consolidated Checking Balances. Start your accounts at the end of the previous month, with individuals holding 500m in their checking accounts (asset balances) and firms holding 2000m in their revenue accounts. Do it carefully, including all 4 stages of the month.

b. Assume Stages 1–3 happen right at the beginning of each month, but Stage 4 expenditures are continuous through the month. Use saw-tooth diagrams to give another picture of the Stage 4 payments and receipts through a typical month on the island.

c. Assuming the money market is in equilibrium (that is, money supply equals money demand), what does the island’s money supply M equal? What does velocity (V) equal per month? Explain why V < 1 using Mr. Keynes’s idea of idle versus active balances.

Now assume each economic agent (that is, each household as well as each firm and the government) does 2 short-term cash management transactions per month.

d. Use saw-tooth diagrams to give a picture of the Stage 4 payments and receipts through a typical month on the island, now that there is some STCM. Why is the pattern of deposits and withdrawals between time deposits T and demand deposits D the opposite for buyers relative to sellers?

e. What must the island’s money supply equal now? What does velocity (V) equal per month? Compare with your answer to part c, and explain why V has increased.