The Financial System and Money

Problem Set

- 1. Which of the following assets is the MOST liquid?
 - A. a \$50 bill
 - B. a \$50 Amazon.com gift certificate
 - C. 100 shares of Microsoft stock
 - D. an economics textbook
 - E. a house
- 2. Which of the following is considered to be money?
 - A. Google stock
 - B. bonds
 - C. credit cards
 - D. checking account deposits
 - E. real estate.
- 3. When you are using money to purchase a new MP3 player, money is serving as a:
 - A. store of value.
 - B. unit of barter.
 - C. unit of account.
 - D. double coincidence of wants.
 - E. medium of exchange.
- 4. A bond is considered:
 - A. an asset that is not part of the money supply.
 - B. M1.
 - C. M2.
 - D. a liability that is part of the money supply.
 - E. the same as a share of stock in a company.
- 5. The narrowest definition of money excludes:
 - A. currency in the vault at the bank.
 - B. traveler's checks.
 - C. currency in circulation.
 - D. checkable bank deposits.
 - E. coins in circulation.
- 6. "Tuition at State University this year is \$8,000." Which function of money does this statement best illustrate?
 - A. store of value
 - B. medium of exchange
 - C. unit of account
 - D. means of deferred payment
 - E. near money
- 7. Suppose Ronny decides to withdraw all the cash out of his checking account and open a single time deposit account at the same bank. As a result of this transaction:
 - A. M2 falls but M1 remains unchanged.
 - B. M1 and M2 both fall.
 - C. M1 and M2 both remain unchanged.
 - D. M1 falls but M2 remains unchanged.
 - E. M1 and M2 both rise.

- 8. Which of the following financial assets belongs to M2, but not to M1?
 - A. a savings account
 - B. a checkable deposit
 - C. Currency
 - D. travelers' checks
 - E. coins
- Suppose you transfer \$500 from your savings account to your checking account. With this transaction, M1 and M2
 - A. increased; decreased
 - B. increased; stayed the same
 - C. decreased; decreased
 - D. stayed the same; decreased
 - E. increased; increased

Use the table below to answer questions 10-11.

Money Aggregates	Amounts (in billions)
Currency	\$100
Checkable deposits	\$300
Travelers checks	\$50
Small-denomination time deposits	\$700
Savings deposits	\$75
Money market mutual funds (individuals)	\$500
Large-denomination time deposits	\$200

- 10. The money supply measured by M1 is:
 - A. \$325 billion.
 - B. \$450 billion.
 - C. \$1,425 billion.
 - D. \$1,875 billion.
 - E. \$400 billion.
- 11. The money supply measured by M2 is:
 - A. \$450 billion.
 - B. \$1,425 billion.
 - C. \$1,725 billion.
 - D. \$2,075 billion.
 - E. \$1,200 billion.

12. Suppose you hold a gift certificate, good for certain products at participating stores. Is this gift certificate money? Why or why not?

The defining characteristic of money is its liquidity: how easily it can be used to purchase goods and services. Although a gift certificate can easily be used to purchase a very defined set of goods or services (the goods or services available at the store issuing the gift certificate), it cannot be used to purchase any other goods or services. A gift certificate is therefore not money, since it cannot easily be used to purchase all goods or services.

- 13. Which of the following are money in the U.S. economy? Which are not? Explain your answers by discussing each of the three functions of money (medium of exchange, store of value, and unit of account).
 - a. A U.S. penny.

A U.S. penny is money in the U.S. economy because it is used as a medium of exchange to buy goods or services, it serves as a unit of account because prices in stores are listed in terms of dollars and cents, and it serves as a store of value for anyone who holds it over time.

b. A Mexican peso.

A Mexican peso is not money in the U.S. economy, because it is not used as a medium of exchange, and prices are not given in terms of pesos, so it is not a unit of account. It could serve as a store of value, though.

c. A Picasso painting.

A Picasso painting is not money, because you cannot exchange it for goods or services (medium of exchange), and prices are not given in terms of Picasso paintings (unit of account). It does, however, serve as a store of value.

- 14. Although most bank accounts pay some interest, depositors can get a higher interest rate by buying a certificate of deposit, or CD. The difference between a CD and a checking account is that the depositor pays a penalty for withdrawing the money before the CD comes due—a period of months or even years. Small CDs are counted in M2, but not in M1. Explain why they are not part of M1.
 - The important characteristic of money is its liquidity: how easily it can be used to purchase goods and services. M1, the narrowest definition of the money supply, contains only currency in circulation, traveler's checks, and checkable bank deposits. CDs aren't checkable—and they can't be made checkable without incurring a cost because there's a penalty for early withdrawal. This makes them less liquid than the assets counted in M1.
- 15. For each of the following transactions, what is the initial effect (increase or decrease) on M1? Or M2?
 - a. You sell a few shares of stock and put the proceeds into your savings account.

Shares of stock are not a component of either M1 or M2, so holding fewer shares does not decrease either M1 or M2. However, depositing the money into your savings account increases M2, since the savings account is part of M2 (but not part of M1). M1 does not change.

b. You sell a few shares of stock and put the proceeds into your checking account.

Shares of stock are not a component of either M1 or M2, and so holding fewer shares does not decrease either M1 or M2. However, depositing the money into your checking account increases M1, since checking accounts are part of M1. It also increases M2, since M1 is part of M2.

c. You transfer money from your savings account to your checking account.

Moving money from savings to checking has no effect on M2, since both savings accounts and checking accounts are included in M2. However, since savings accounts are not part of M1, moving money from savings to checking does increase M1.

d. You discover \$0.25 under the floor mat in your car and deposit it in your checking account.

Depositing cash into a checking account does not change M1 or M2. You are simply transferring money from one component of M1 (currency in circulation) to another component of M1 (checkable deposits).

e. You discover \$0.25 under the floor mat in your car and deposit it in your savings account.

Depositing \$0.25 into your savings account has no effect on M2, since both savings accounts and currency in circulation are in M2. However, since savings accounts are not part of M1, depositing the \$0.25 into your savings account reduces M1.

- 16. Indicate whether each of the following is part of M1, M2 or neither:
 - a. \$95 on your campus meal card.

\$95 on your campus meal card is similar to a gift certificate. Because it can only be used for one purpose, it is not part of either M1 or M2.

b. \$0.55 in the change cup of your car.

\$0.55 in the change cup of your car is part of currency in circulation; it is part of both M1 and M2.

c. \$1,663 in your savings account.

\$1,663 in your savings account isn't directly usable as a medium of exchange, so it is not part of M1; but because it can readily be converted into cash or checkable deposits, it is part of M2.

d. \$459 in your checking account.

A \$459 balance in your checking account is part of both M1 and M2; it represents a checkable deposit.

e. 100 shares of stock worth \$4,000.

100 shares of stock are not part of either M1 or M2. Although an asset, stock is not a highly liquid asset.

f. A \$1,000 line of credit on your Sears credit card.

A \$1,000 line of credit on your Sears credit card account is not part of eithe rM1 or M2 because it does not represent an asset.

17. With the use of credit cards becoming more prominent and the availability of credit broader than ever, why are credit cards not included in the Ms?

Credit cards are short-term loans. Credit-card bills are not directly subtracted from checking accounts. Instead the credit-card holder pays the bill from a checking or NOW account. Not only should loans NOT be counted as money, but if they were and the payment were also counted, one economic transaction would be double-counted in the money supply.