

**4** Macroeconomics

**ACTIVITY 4-1**

Money is generally accepted in payment for goods and services and serves as an asset to its holder. Money is anything that serves three important functions: a medium of exchange, a standard of value, and a store of value.

To be a good **medium of exchange**, money must be accepted by people when they buy and sell goods and services. It should be portable or easily carried from place to place. It must also be divisible so that large and small transactions can be made. It must also be uniform so that a particular unit such as a quarter represents the same value as every other quarter.

To be a good **standard of value**, or unit of account, money must be useful for denominating values (prices). To accomplish this, money must be familiar, divisible, and accepted.

To be a good **store of value**, money must be durable so it can be kept for future use. It also should have a stable value so people do not lose purchasing power if they use the money at a later time.

Throughout history, a wide variety of items have served as money. These include gold, silver, tobacco, beer, cattle, metal coins, paper bills, and checks. Money is evaluated based on how well it accomplishes the three functions of money. Money is what money does!

1. Use the table on the right to evaluate how well each item would perform the functions of money today. If an item seems to fulfill the function, put a + sign in the box; if it does not fulfill a function well, place a - sign in the box. Put a ? sign in the box if you are unsure whether the item fulfills that function of money. Circle the best form of money (the item with the most + signs).

Item	Medium of Exchange	Store of Value	Standard of Value
Salt			
Cattle			
Gold			
Copper Coins			
Beaver Pelts			
Personal Checks			
Savings Account Record			
Prepaid Phone Card			
Debit Card			
Credit Card			
Bushels of Wheat			
\$1 Bill			
\$100 Bill			

**DEFINING AND MEASURING THE MONEY SUPPLY**

Defining and measuring money is a difficult task because of changes in technology and the financial system. There is agreement on a simple conceptual definition of money. However, the complexity of the real world prevents agreement on a single measure of the money supply.

The Federal Reserve (Fed) uses **monetary** aggregates (called M1 and M2) as a way to measure the money supply. In defining these measures of the money supply, the Fed draws lines between groups of assets that serve both the medium-of-exchange and store-of-value functions of money to varying degrees. M2 is broader than M1. M2 includes M1 plus additional less **liquid** assets. **Liquidity** refers to the ease with which an asset can be turned into cash. Cash is therefore the most liquid asset (because it is cash already!). The other assets that are included in M2 are less liquid since it takes time (or a loss of value) to turn them into cash.

- **M0** (or MB) is the monetary base of an economy; it includes all of the physical paper and coin currency in circulation, plus bank reserves held by the central bank
- **M1** includes all of **M0** and demand deposits and checking accounts, savings accounts and ~~traveler's checks~~.
- **M2** includes all of **M1**, small-denomination time deposits (less than \$100,000) minus individual retirement accounts (IRAs), and money market funds minus IRAs.

M1 includes items that are primarily used as a medium of exchange while M2 adds items that are primarily used as a store of value.

In each of the following scenarios, which function of money is being served? Indicate **M** for medium of exchange, **S** for store of value, or **U** for unit of account.

- \_\_\_\_ 2. You pay for your lunch with a \$5 bill.
- \_\_\_\_ 3. A car is described as being worth \$5,000.
- \_\_\_\_ 4. A grandparent puts \$200 into a savings account for a grandchild's future.
- \_\_\_\_ 5. You decide you want to give \$10 worth of candy to a friend for his birthday.
- \_\_\_\_ 6. A driver pays a \$2 toll.
- \_\_\_\_ 7. You set aside \$10 per week to save up for a new computer.

8. Why are credit cards not considered money? Do they serve any of the functions of money?

9. Order the list of assets below from 1 to 5, with 1 being most liquid and 5 being least liquid.

\_\_\_\_\_ a \$10 bill      \_\_\_\_\_ a traveler's check      \_\_\_\_\_ a car      \_\_\_\_\_ a money market share      \_\_\_\_\_ a house

10. Use the data in Table 4-1.1 to calculate M1 and M2 in billions of dollars. Assume all items not mentioned are zero.

Table 4-1.1

Calculating the Money Supply

	in billions of dollars	(A) M1 =
Checkable deposits (demand deposits, NOW, ATM, and credit union share draft accounts)	\$1,500	
Currency in circulation	\$1,000	
Savings deposits	\$7,000	
Small-denomination time deposits	\$500	(B) M2 =
Money market funds	\$600	

**THE FINANCIAL SYSTEM AND FINANCIAL ASSETS**

The financial system is made up of **financial markets** that facilitate the flow of funds from lenders to borrowers. In financial markets, households invest their savings in financial assets, which provide funds for investment spending. A well-functioning financial system is important to the economy because it makes households' savings available for investment that leads to long-run economic growth. The financial system helps to address three problems: transactions costs, risk, and liquidity. Financial markets reduce transaction costs by making it easier and less costly to match borrowers and lenders. They can be used to reduce the risk taken by individual lenders and borrowers by allowing **diversification** (investing in several different assets). And they can be used as a way to provide liquidity (access to cash). **Financial intermediaries** (e.g., banks and mutual funds) are institutions that transform funds they gather into financial assets.

A **financial asset** is a paper claim that entitles its buyer to future income from the seller. There are four important types of financial assets: loans, stocks, bonds, and bank deposits. A loan is an agreement to repay, with interest. A bond is an IOU issued by the borrower that represents a promise to pay fixed interest payments at regular intervals and repay the principal on a specified date. A stock is a share in the ownership of a company. A mutual fund is a financial intermediary that creates a **portfolio** (collection of financial assets) made up of different stocks and resells shares of it to individual investors. A mutual fund allows small investors to diversify their portfolio. Bank deposits are claims on a bank that oblige it to give funds back to a depositor on demand.

11. In each of the following scenarios, identify the financial asset (**loan, stock, bond, bank deposit**) and what important function of financial markets is being served (**reduce transaction costs, reduce risk, provide liquidity**). Explain how the asset is serving the function(s) you identify.

Scenario	Financial Asset	Function(s)
(A) The cost of building a new factory is financed by selling shares in the company.		
(B) Funds from many small savers are combined and provided to an individual to buy a house.		
(C) The \$1,000 in your savings account at your local bank pays you 3 percent interest.		
(D) A firm borrows money by promising to pay a fixed sum of interest each year for 10 years and then pay back the amount borrowed at the end of 10 years.		