

# What is Money?

This lecture examines the functions of money, the evolution of the payments system, and how money is measured.

## Functions of Money

### A. Medium of Exchange

1. Money is any item that is generally accepted as a means of payment.
2. Money promotes efficiency by eliminating much of the time spent exchanging goods and services.
  - a. It eliminates the need for finding a double coincidence of wants (which is a common problem in barter economies).
  - b. It promotes specialization and division of labor.

3. Any medium of exchange (including commodity money) must:
  - a. be easily standardized.
  - b. be widely accepted.
  - c. be divisible.
  - d. be easy to carry.
  - e. not deteriorate easily.

## B. Unit of account

1. Money serves as a common unit to measure the value of goods and services.
2. Money reduces transaction costs by allowing price to be quoted only in the common monetary unit.

## C. Store of value

1. Money is an asset that people use to store their wealth.
  - a. Other assets are also a store of wealth.
  - b. Credit cards are NOT money because they are NOT a store of wealth.
2. Money is the most liquid form of all assets.
3. Inflation erodes the value of money.

# Evolution of the Payments System

## A. Commodity money.

1. From ancient times to several hundred years ago, precious metals functioned as money.
2. Precious metals do not make the best medium of exchange because they are very heavy and hard to transport.

## B. Paper currency.

1. Initially, paper currency was convertible into coin or a fixed quantity of precious metals.
2. Now, paper currency is fiat money because it is legal tender but not convertible into precious metals.

## C. Checks

1. Checks allow the transfer of money from one bank account to another.
2. They reduce the transportation costs of moving currency because checks between two banks often cancel each other out.
3. Two problems with checks.
  - a It takes time to move checks between places (float).
  - b. Check processing is costly.

## D. Electronic payments

1. These payments are automatically deducted from a bank account.

## E. Electronic money (e-money)

1. Debit card enables consumers to pay for goods by electronically transferring funds from their bank accounts.
2. Store-of-value card is purchased upfront for a preset amount (ex., prepaid VISA card, store gift card).
3. Smart card is like a store-of-value card except it contains a computer chip that allows it to be repeatedly loaded with money.

## Bitcoin: Is It Really Money?

- A. Bitcoin is a type of electronic money created in 2009.
- B. Decentralized users create new Bitcoin by “mining” when they use their computing power to verify and process Bitcoin transactions.
- C. Does Bitcoin satisfy the three characteristics of money?
  1. Bitcoin is a good medium of exchange for a couple reasons.
    - a. Bitcoin transaction fees are substantially lower than with credit cards.
    - b. Bitcoin transactions can be made anonymously.
  2. Bitcoin does not make a good unit of account or a store of value because its value has experienced an extremely high level of volatility.

## Are We Headed to a Cashless Society?

- A. For decades, there have been predictions of a cashless society, but they have not occurred.
- B. Several factors work against the payments system becoming cashless.
  1. Setting up the electronic payments system is expensive.
  2. Electronic payments systems are subject to security concerns.
  3. An electronic system of payments reduces privacy because it leaves an electronic trail of purchasing habits.



## How Money is Measured: The Monetary Aggregates

A.  $M1 = \text{currency} + \text{traveler's checks} + \text{demand deposits} + \text{other checkable deposits}$

[M1 is money used for transaction purposes.]

1. Currency includes paper money and coins held by the nonbank public (does not include cash in ATMs or bank vaults).
2. Traveler's checks comprise only traveler's checks not issued by banks.
3. Demand deposits consist of business checking accounts and traveler's checks issued by banks.
4. Other checking accounts include all other non-business checking accounts such as interest-bearing checking accounts held by households.

B.  $M2 = M1 + \text{small time deposits} + \text{savings deposits} + \text{retail money market mutual funds}$

[M2 is M1 + money used by households for a store of wealth.]

1. Small time deposits are CDs under \$100,000.
2. Savings deposits include non-transaction deposits at banks and money market deposit accounts (bank-issued accounts that are similar to money market mutual funds).
3. Retail money market mutual funds are money market mutual funds held by households. (These accounts have check writing privileges.)

C.  $MZM = M1 + \text{savings deposits} + \text{retail money market mutual funds} + \text{institutional money market mutual funds}$

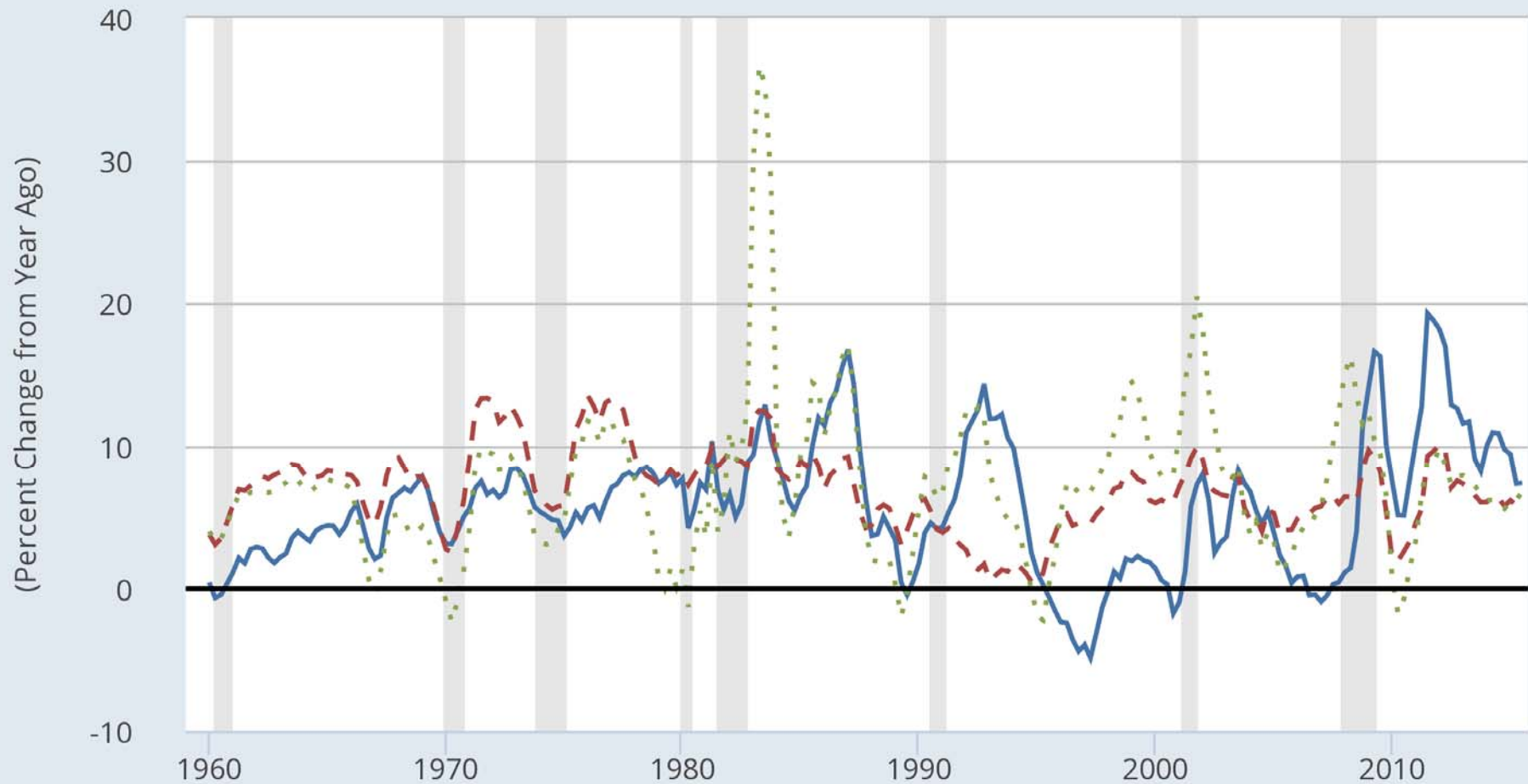
[MZM is zero maturity money.]

1. Institutional money market mutual funds are money market mutual funds not held by households.

## D. M1, M2, and MZM behave differently over time.

**FRED** 

— M1 Money Stock  
- - M2 Money Stock  
... MZM Money Stock



## Where Are All of the U.S. Dollars?

- A. Around \$4,000 of U.S. currency for every person in the United States is held outside of banks.
- B. Who holds large quantities of U.S. currency and why?
  1. Criminals because currency provides anonymity for their illegal activities.
  2. Foreigners in countries that have experienced high inflation hold U.S. currency as a hedge against inflation.