What Is Money?

Chapter 3

Econ 351 – Monetary Economics

University of Tennessee, Knoxville

August 24, 2026

Preview

- We study what money is, how it evolved, and how it is measured today
- Three functions of money: medium of exchange, unit of account, store of value
- From commodity money to fiat money, checks, e-money, and cryptocurrencies
- The Fed's monetary aggregates: M1 and M2

Money (the money supply): anything that is generally accepted as payment for goods and services or in the repayment of debts.

Outline

Meaning of Money

Functions of Money

Payments System

Measuring Money

Why Study Money?

Central Question

- Is money neutral, or does it affect real economic activity?
- If money is not neutral, monetary policy can influence the real economy

Key Assumption

- Money affects real economic activity
- Examples: output (GDP) and unemployment

How Do We Study Money?

- Money supply and money demand
- What is the price of money?

What Is Money?

Starting Point

- The most concrete form of money is cash

Economists' Definition

- Money (money supply): anything generally accepted as payment
- Examples: currency, checking deposits, savings deposits

Key Distinctions

- Money: stock concept (amount at a point in time)
- Wealth: total value of assets
- Income: flow concept (earnings per period)

Outline

Meaning of Money

Functions of Money

Payments System

Measuring Money

Functions of Money

Medium of Exchange

- Facilitates transactions
- Promotes economic efficiency

Unit of Account

- Measures value in the economy
- Simplifies price comparisons

Store of Value

- Preserves purchasing power over time

The **medium of exchange** function is what distinguishes money from all other assets.

Functions of Money: Medium of Exchange

Medium of Exchange

- Used to pay for goods and services
- Eliminates the **double coincidence of wants**

Benefits

- Reduces transaction costs
- Promotes specialization and division of labor

Liquidity and Other Desirable Properties

- High liquidity: can be **quickly** converted into goods at **low cost**
- Easily standardized and widely accepted
- Divisible, portable, and durable

Functions of Money: Unit of Account

Unit of Account

- Money is used to measure and compare the value of goods and services

Why It Matters

- Reduces the number of prices needed in an economy
- Lowers transaction costs

Price Comparison

- Without money: $\frac{n(n-1)}{2}$ relative prices
- With money: n prices

With 1,000 goods, barter needs $\frac{1000 \times 999}{2} = 499{,}500$ relative prices; with money, only 1,000.

Functions of Money: Store of Value

Store of Value

- Money preserves purchasing power over time

Money vs. Other Assets

- Money is the most liquid asset
- Other assets may yield higher returns but are less liquid

Role of Inflation

- Inflation reduces the value of money as a store of value
- Extreme inflation can undermine the use of money

Outline

Meaning of Money

Functions of Money

Payments System

Measuring Money

Overview of the Payments System

Payments System

- The set of methods used to make transactions in an economy
- Evolves together with forms of money

Evolution of Payments

- Commodity money
- Fiat money
- Checks
- E-money
- Cryptocurrencies

Payments System: Commodity Money

Commodity Money

- Money made from precious metals or other valuable commodities

Drawbacks

- Heavy and costly to transport
- Inconvenient for large transactions



A rai stone on the island of Yap – commodity money too heavy to move.

Wikimedia Commons, Bartek.cieslak at Polish Wikipedia, CC BY-SA 3.0

Commodity Money Through History



Cowrie shells, used as currency in ancient China.

Wikimedia Commons, Gary Todd, CC0



A 1907 U.S. $20 gold "double eagle" coin.

Wikimedia Commons, US Mint / National Numismatic Collection, Public domain

Commodity money has value in its own right (shells, metal), which makes it widely accepted – but also heavy, costly to transport, and inconvenient for large transactions.

Payments System: Fiat Money

Fiat Money

- Money with no intrinsic value
- Declared legal tender by the government
- Government can control the quantity of money

Why People Accept It

- Trust in the issuing authority
- Government backing and enforcement

Drawbacks

- Easily stolen
- Bulky for large transactions



A U.S. $1 Federal Reserve note: "legal tender for all debts, public and private."

Wikimedia Commons, ESEMES, Public domain

Payments System: Checks

What Are Checks?

- Instructions to transfer funds from one bank account to another

Advantages

- Lower transportation costs
- Provide a record of payment and reduce theft risk

Drawbacks

- Processing delays
- High processing costs ($5 billion/year in the U.S.)

Payments System: E-Money

What Is E-Money?

- Monetary value stored electronically
- Examples: debit cards, stored-value cards, e-cash (e.g., PayPal)

Advantages

- Convenient and efficient
- Reduces reliance on physical cash

Challenges

- Security and privacy concerns
- High setup and infrastructure costs
- Require large upfront investment in technology, networks, and security

Are We Headed for a Cashless Society?

Key Points

- Predictions of a cashless society have existed for decades
- Use of e-money will continue to grow
- Cash is unlikely to disappear completely

Are We Headed for a Cashless Society?

Key Points

- Predictions of a cashless society have existed for decades
- Use of e-money will continue to grow
- Cash is unlikely to disappear completely

Why Cash Is Unlikely to Disappear

- High setup and equipment costs
- Security concerns
- Privacy concerns

Payments System: Cryptocurrencies

What Are Cryptocurrencies?

- Decentralized digital assets that use cryptography (e.g., Bitcoin, Ethereum)

Pros

- Can enable fast, low-cost transfers (in some settings)
- Transactions are pseudonymous

Cons

- High price volatility
- Limited use as a unit of account and a store of value
- Compliance and illicit-use concerns

Will Bitcoin Become the Money of the Future?

Key Points

- Bitcoin is a decentralized digital currency created in 2009
- New bitcoins are generated through mining (transaction verification)
- Bitcoin works as a medium of exchange, but performs poorly as a unit of account and store of value

Judge any candidate "money" by the three functions: Bitcoin passes as a medium of exchange, but its high price volatility makes it a poor unit of account and store of value.

Outline

Meaning of Money

Functions of Money

Payments System

Measuring Money

Measuring Money

Key Question

- Which assets should be counted as money?

Monetary Aggregates (by Liquidity)

- **M1 (most liquid)**: currency, traveler's checks, demand deposits, other checkable deposits
- **M2**: M1 + savings deposits, small time deposits, money market deposit accounts, money market mutual fund shares

The aggregates are nested by **liquidity**: M1 contains only assets that can be spent directly; M2 adds assets that can be converted to cash quickly at little cost.

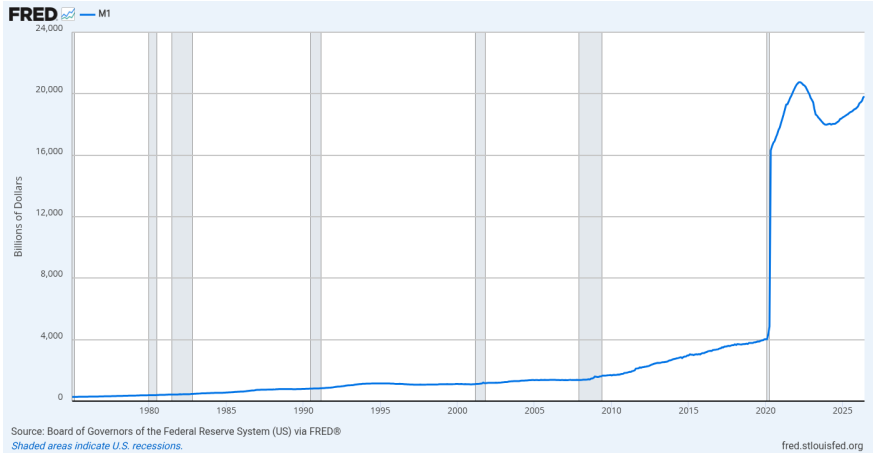
The Fed's Monetary Aggregates

	Value as of August 31, 2020 ($ billions)
M1 = Currency	1,920.4
+ Demand deposits	2,317.0
+ Other checkable deposits	1,176.4
Total M1	5,413.8
M2 = M1	
+ Small-denomination time deposits	351.9
+ Savings deposits and money market deposit accounts	11,593.4
+ Money market mutual fund shares (retail)	1,105.2
Total M2	18,464.3

Measures of the monetary aggregates (value as of August 2020, $ billions).

Source: Mishkin, The Economics of Money, Banking, and Financial Markets; data from the Federal Reserve

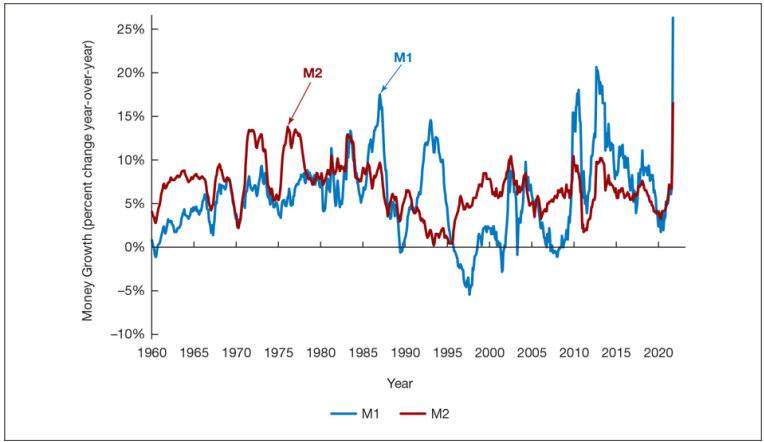
The M1 Money Stock



M1 money stock, 1975–present ($ billions); the jump in May 2020 reflects the Fed's redefinition of M1 to include savings deposits.

Source: FRED, Federal Reserve Bank of St. Louis

Growth Rates of M1 and M2



Growth rates of the M1 and M2 aggregates, 1960–2020.

Source: Mishkin, The Economics of Money, Banking, and Financial Markets

Does It Matter Which Aggregate We Use?

Key Issue

- Does it matter which monetary aggregate we use (M1 or M2)?

Does It Matter Which Aggregate We Use?

Key Issue

- Does it matter which monetary aggregate we use (M1 or M2)?

Why It Matters

- M1 and M2 can grow at different rates
- This complicates the interpretation of monetary conditions

Does It Matter Which Aggregate We Use?

Key Issue

- Does it matter which monetary aggregate we use (M1 or M2)?

Why It Matters

- M1 and M2 can grow at different rates
- This complicates the interpretation of monetary conditions

Implication

- Choosing the appropriate aggregate is important for policymakers

Chapter Summary

- Money is anything generally accepted as payment; it is a stock, distinct from wealth and income
- Money serves as a medium of exchange, a unit of account, and a store of value – the first function is what sets it apart from other assets
- The payments system evolved from commodity money to fiat money, checks, e-money, and cryptocurrencies
- The Fed measures money with the aggregates M1 and M2, ranked by liquidity
- M1 and M2 can grow at different rates, so the choice of aggregate matters for policy