

# What is Money? (9/2/2010)

Econ 310-004

## Definitions

- **government** – a legitimized monopoly on coercion
- **law of association** (comparative advantage) – even if someone is *absolutely* more productive at 2 activities, if he is *comparatively* more productive at 1 activity than another activity relative to a 2<sup>nd</sup> person, then he will be better off specializing and trading than producing in isolation
- **reverse inequality of value** – both parties to the trade value what they're getting more than what they're giving up
- **barter** (direct exchange) – trade for something that can be used directly in consumption or production
- **double coincidence of wants** – each person must want the good his trading partner is offering
- **transaction costs** – opportunity costs of finding a trading partner, negotiating a deal, and monitoring the terms
- **medium of exchange** (indirect exchange) – something not wanted for commodity value, but rather for trade value
- **money** – commonly accepted medium of exchange
- **commodity money** – money with a close relationship between money value and commodity value
- **fiat money** – money in which monetary value far exceeds trade value
- **unit of account** – common numerator of all prices

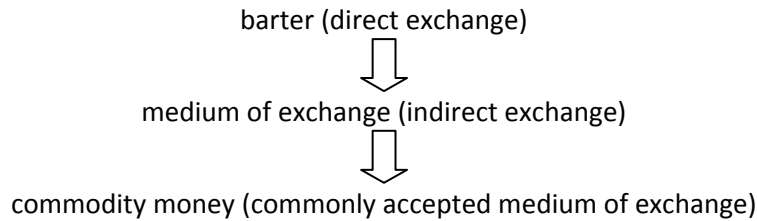
More properly:

- **medium of account** – good used as a pricing or accounting unit
- **unit of account** – specific quantity of the good used as a pricing or accounting unit
- **store of value** – separates act of buying from selling (saving with low transaction costs)
- **standard of deferred payment** – money is a good way of paying back loans
- **MB** – monetary base (total currency)
- **M1, M2, M3** – money supply (various measures)
- **fiat money** – money with zero maturity
- **wealth** – stock value
- **income** – flow value

## Principles

- Adam Smith discussed the benefits of division of labor and specialization for increasing efficiency in *The Wealth of Nations*
- David Ricardo came up with the law of association (comparative advantage).
- Price is objective; value is subjective.
- Reverse inequality of value in trade is what makes voluntary trade mutually advantageous.
- Consumer and producer surpluses are graphical representations of the gains from trade.
- Transaction costs (especially search costs) can be very high under barter.
- Barter remains where laws or social norms retard indirect trade.
- Using a medium of exchange (indirect exchange) can make more beneficial trades possible.
- When a circulating medium of exchange becomes commonly accepted (widely adopted by most traders), it becomes money.
- Many forms of money have been adopted around the world.
- Only MB (monetary base) includes reserves.
- $M3 > M2 > M1$
- The Federal Reserve stopped tracking M3 in 2006.

## Evolution



### Places barter survives

- to evade or reduce taxes
- underground economy
- marriage, dating, sex
- new car (trade in old)
- health/dental benefits (less taxes)

### Functions of money

- medium of exchange
- medium of account
- store of value
- standard of deferred payment

### Historical monies

- |                                  |                            |
|----------------------------------|----------------------------|
| • Colonial Virginia:             | Tobacco                    |
| • West Indies:                   | Sugar                      |
| • Abyssinia (Ethiopia):          | Salt                       |
| • Ancient Greece:                | Cattle                     |
| • Medieval Iceland:              | Wool                       |
| • Scotland:                      | Nails                      |
| • Ancient Egypt:                 | Copper rings               |
| • Native Americans:              | Wampum (beads on a string) |
| • Island of Yap (South Pacific): | Fei (large stone wheels)   |
| • West Africa, China:            | Cowrie shells              |
| • Aztecs:                        | Cacao beans (chocolate)    |
| • China, Mongolia, Siberia:      | Tea                        |
| • Mesopotamia:                   | Barley (grain)             |
| • Ancient Japan:                 | Rice                       |
| • Colonial Australia:            | Rum                        |
| • Prisons                        | Cigarettes                 |

### Money supply

- MB = currency in circulation + reserves in bank vaults + reserves with the Fed
- M1 = currency in circulation + travelers checks + demand deposits + other checkable deposits
- M2 = M1 + time deposits (<\$100k) + savings deposits + money market mutual fund shares (individual)
- M3 = M2 + time deposits (>\$100k) + money market mutual fund shares (institutional)  
+ short term repurchase agreements + other large liquid assets
- MZM = currency in circulation + travelers checks + demand deposits + other checkable deposits  
+ savings deposits + all money market mutual fund shares