

ECON 1a, Fall 2008, Warren Gibson  
Lecture 15, Mankiw Ch. 16  
Money

- Particular forms of money are accepted largely because they were accepted yesterday. How did money originate?
  - Direct exchange is impractical. People begin to use some goods as “media of exchange.”
  - Examples in history: cattle, sea shells, wampum, tobacco.
  - The more some particular good is used, the more attractive it becomes as a medium of exchange. Attributes that make for a good medium of exchange:
    - \* Durable (not strawberries).
    - \* Scarce relative to weight (gold but not iron).
    - \* Divisible (not cattle)
    - \* Story of boulders on Yap Island.
  - Gold and silver became common as money in history.
- Definition of money A generally accepted medium of exchange.
- Subsidiary definitions of money (contrast Mankiw)
  - Unit of account. Avoids confusion of relative prices:
    - \* Three goods in an economy: 3 relative prices.
    - \* Four goods in an economy: 6 relative prices.
    - \* 50 goods in an economy: 1,225 relative prices.
  - Store of value. Sell goods or services for money. Use money later to buy desired goods or services.
- Liquidity: ease with which something can be converted to money.
  - Shares of stock: easy
  - Rare and valuable painting: difficult
- Paper money

- Started out as receipts issued by goldsmiths for stored gold
- Began to trade instead of gold
- Goldsmiths began issuing more receipts than gold
- Governments took a monopoly on money production. Gradually withdrew all backing from paper money. Left with “fiat money.”
- Although the definition of money is clear, it’s not always clear whether a particular asset fits the definition. Two common categories:
  - M1:
    1. Currency \$797 billion, (\$2,650 per person)
    2. Bank deposits
    3. Total M1: \$1,374 billion (\$4,580 per person)
  - M2:
    1. Includes everything in M1
    2. Plus bank savings deposits
    3. Plus small time deposits
    4. Plus money market mutual fund balances
    5. A few minor categories
    6. Total M2: \$6,948 billion (\$23,160 per person)
- Money market mutual funds
  - A kind of mutual fund that buys only very short-term debt
  - Maintains share price of exactly \$1.
  - Invented by smart entrepreneurs, not predicted by economists
  - Extremely safe even though not insured
- How private banks work
  - Demand deposits are deposits that are available on demand, usually checking accounts. Provide depositors with convenience and safety. Access money by writing checks, using ATM, on-line transfer.
  - Bank keeps only a fraction of its demand liabilities. The rest is loaned out.

- When banks maintain only fractional reserves, they actually create money. Mankiw example of money multiplier.
- Banks are required by law to maintain a certain fraction (usually 10%) of their demand deposits in the form of reserves. Reserves consist of
  - \* Cash in bank branches or ATM machines
  - \* An electronic account at the Federal Reserve Bank

Banks do not want to run short of cash and therefore have a business incentive to maintain reserves. Sometimes they hold more reserves than the government requires.
- Bank runs under fractional reserve banking. Deposit insurance.
- Is fractional reserve banking fraud?
  - \* Yes
  - \* No

- The Federal Reserve System

- Established in 1916 through influence of Wall Street bankers who wanted to suppress competition and gain indirect control of the entire national money and banking system.
- Paper money issued by the Fed, printed by Bureau of Engraving & Printing
- Controls the supply of money in three ways:
  1. Open market operations
  2. Reserve requirements
  3. Discount “window”
- Parallels between Fed operations and private counterfeiting
  - \* Sucks value out of existing money
  - \* New money injected at a particular point in the economy
  - \* Helps government cover deficits
- How the Fed is financed
- It has acquired a portfolio of \$835 billion in Treasury securities.
  - \* It collects roughly \$25 billion in interest per year.

- \* Has to give this back to the Treasury but only after deducting expenses.
  - \* Does not need to go to Congress for appropriations to cover operating expenses. This helps the Fed maintain its independence. But independence and accountability are opposites.
- Fed employs lots of economists, who naturally tend not to criticize it.
- Free banking
  - In the past, private banks issued their own banknotes.
  - This could still be possible. Wells Fargo, Citicorp etc. could issue their own notes payable in gold or other assets. Competition would drive down costs and incentivize banks to maintain adequate reserves.