

LECTURE 16: NATURE OF MONEY

- I. Is money the root of all evil?
 - a. Consider the POW camp.
 - b. What if they had to rely on barter?
 - c. The problem with barter is that it relies on a *double coincidence of wants*. Not only do you need to find someone who has what you want, that person must want what you have.
 - d. This system is so inefficient barter is incredibly rare in practice. Even at the dawn of humanity reciprocal gifts—favors—was a sort of currency of the realm.
- II. Money has three basic functions
 - a. *Medium of exchange*—a common denominator that is always included in trades.
 - b. *Unit of account*—a way to easily assess how much an item is worth.
 - c. *Store of value*—something which will not rot, decay, or unavoidably lose value over time.
- III. Types of money
 - a. *Commodity currency*—a currency whose value is derived from a valuable commodity, whether physically made up of that commodity or can be redeemed for it (usually by the government). Gold is a popular example.
 - i. On one hand, a commodity currency makes hyperinflation hard because it's difficult to create more currency (depending on the commodity).
 - ii. But there's a danger of this type of currency: the government has little control over its value. For example, the California and Australian gold rushes coincided with an inflation rate of 30% between 1850 and 1855.¹
 - b. *Fiat currency or token money*—a currency whose value is derived from the legitimacy of the issuing government, often manifested as paper or low grade coins.
 - i. In other words, a currency is worth because people think it's worth something. Because they think it's worth something, they'll accept it in exchange for goods and services. It's a self-fulfilling prophecy.

¹ <http://eh.net/encyclopedia/california-gold-rush/>

IV. Gresham's Law

- a. There is another problem with commodity currency, articulated by 16th century financier Sir Thomas Gresham.
- b. Like most commodity currencies, all coins are legally declared to be equally valuable. Now consider a merchant who discovers he scraps off a bit of the coin, it's still worth just as much *and* he can sell the sliver of gold.
- c. We now have two currencies circulating: "good" money (that with more gold) and "bad" money (that with less gold, a debased currency). *Gresham's Law* states the bad money will drive out the good money.
 - i. In other words, we will see people refuse to spend the "good" money, favoring to transform it into the debased currency.

V. Components of the Money Supply

- a. *Liquidity* describes the ease an asset can be converted into some form of money with little to no loss of purchasing power.
 - i. Dollars are a very liquid asset (by definition). A house is very illiquid.
- b. Recall economists think in terms of stocks and flows.
 - i. *Stock* is how much there is. (e.g. wealth)
 - ii. *Flow* is the rate of change. (e.g. income)
 - iii. Economists have different definitions on the stock of money:
- c. **M1**. Currency in the hands of the public + checkable deposits, or money the public can withdraw from the bank.
 - i. *Currency* includes the bills and coins in your pocket, dresser, and couch.
 - ii. *Checkable deposits* are anything included in a checking account. When you pay with your debit card (not your credit card), you are using M1.
 - iii. As of the week of January 30, 2017, M1 was \$3,403.0 billion.²
- d. **M2**. M1 + Saving deposits + small-denominated time deposits + money market mutual funds
 - i. *Savings deposits* include savings accounts and money market deposit accounts. There're typically rules and limits to how much you can withdraw from these sorts of deposits so they are not as liquid as funds in a checking account.
 - ii. *Small-denominated time deposits* mature at a particular time (say, in six months) and there is a penalty if you cash out too

² <http://www.federalreserve.gov/releases/h6/current/default.htm>

soon, but you get a higher interest rate. A certificate of deposit (CD) is an example. “Small” in this context means less than \$100,000.

- iii. *Money market mutual funds* are investments in CDs and government securities. They also generate a small amount of interest and includes a penalty for withdrawing early.
- iv. As of the week of January 30, 2017, M2 was \$13,282.2 billion.