# MBHS Economics Club

## Commodity Theories Notes

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**Review**
If you didn't come to the last meeting, go check out our last email (or the Google Groups announcement page) and look at the notes for that lecture.

If you didn't get the email, email mbhsecon@gmail.com and we'll add you to the mailing list.

**The Value Paradox**
The apparent contradiction that, although water is on the whole more useful in terms of survival than diamonds, diamonds command a higher price in the market. It had already appeared as early as Plato's *Euthydemus*. Almost every subsequent philosopher tried to answer this question, most notably Adam Smith, Karl Marx, and John Maynard Keynes.

**Adam Smith (1723 - 1790)**

- A Scottish Enlightenment philosopher, he is the father of modern capitalism.
- In 1776, he wrote a treatise on classical economics, *The Wealth of Nations*, which is today considered a fundamental work in classical economics. The book discusses the division of labor, productivity, and free markets (capitalism).
    - Trivia: It's said that former British Prime Minister Margaret Thatcher (Ronald Reagan's BFF) carried a copy of the book in her handbag, since she (and him) was/were all about capitalism -- she belonged to the Conservative Party of the UK, and he to the Republican Party.

**Commodity: Not Necessarily a Good**
- In ye goode olde days, commodities were physical substances which could be exchanged for other, similar things (think oil, brownies, or friends).
- In neoclassical economics, a commodity is simply anything that can be exchanged, not just physical objects. For example, services and time may be exchanged, and thus would be considered commodities.
- This allows us to apply the ideas of production possibilities, demand, and supply to things besides physical goods. Which is ~~good~~ really great.

**Application: Labor Markets**
- This concept can be used to generalize supply and demand to labor, or jobs. In this case we would replace "price" with wages and "quantity demanded" with the number of jobs.
    - Shifting Demand (Job Openings):
        - Education and Training
        - Number of companies

        - Government Regulations
        - Price and Availability of other inputs
        - Technology
    - Shifting Supply (People applying for Jobs):
        - Number of Workers
        - Required Education
        - Government Policies
        - Technology

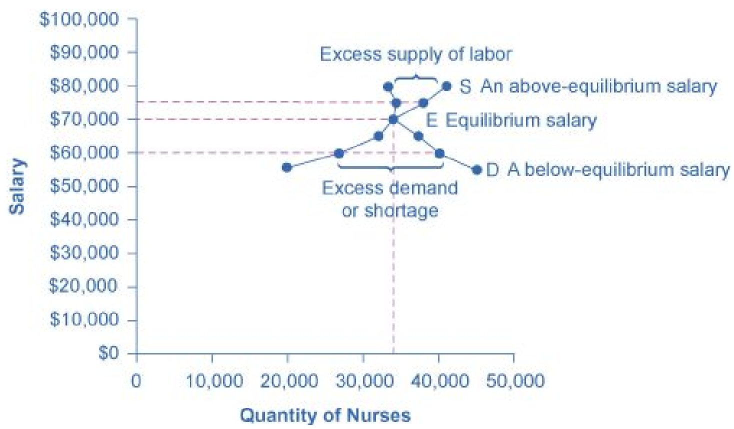


*Fig 1.0: Labor Market for Nurses (the downward sloping line is demand, and upward sloping is supply.)*

- From this view, minimum wage is a price floor. From what we previously learned, this is bad!!!
    - It isn't actually bad because minimum wage covers less than 1% of people, so the shift away from equilibrium is negligible (i.e. within market fluctuations.) Also, it means you are a less horrible person. Setting a minimum wage at something like 50 dollars though, that would be bad.

**Application: Finances**

- We can also generalize our ideas about supply and demand to financial instruments, (e.g. loans, stocks, currencies, derivatives, etc.) primarily loans. Here, we can define the "price" of a loan to be the interest rate, and we can define the "quantity" of a loan to be its availability, (i.e. how large a loan you can get.)

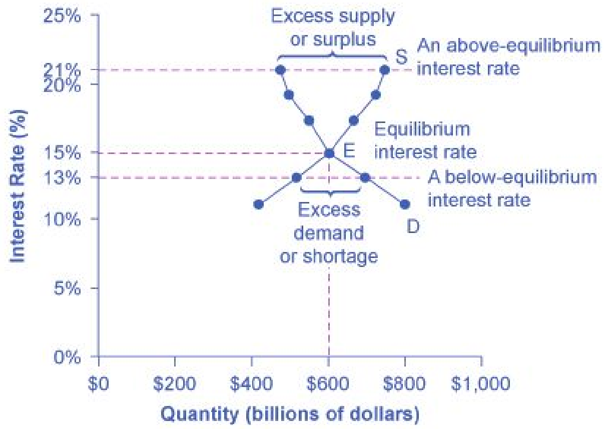


*Fig 1.1: Financial Market (the downward sloping line is demand, and upward sloping is supply.)*

- So we can draw the same graphs and, BAM! We see that as interest rates rise, more people are willing to give larger loans, but fewer people are willing to take them, and vice versa.
- This graph becomes really important in a few weeks, when we learn about economic growth!

**U.S. Loans: Why Neoclassical Theory Isn't Always Right**

- So, by the statements we made earlier, and the things you know on your own, you'd think, wow, the U.S. government has taken trillion-dollar loans; it should have interest rates over 100%, no?

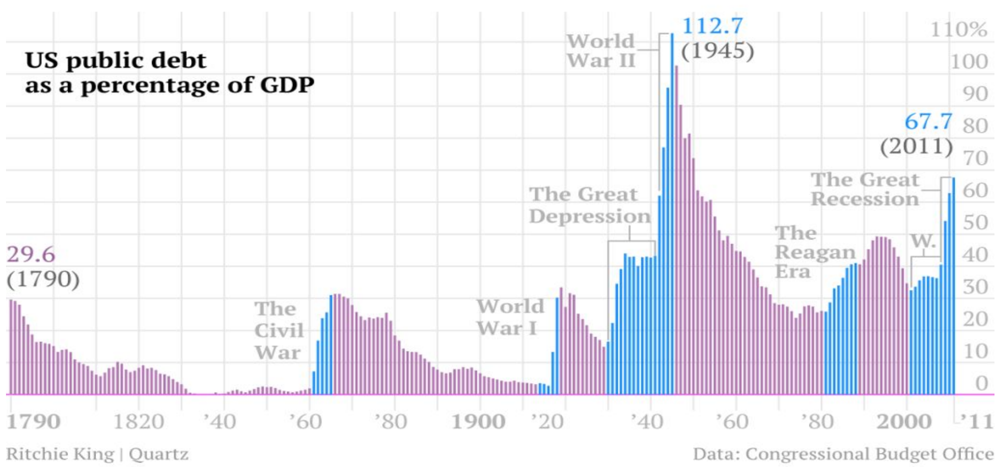


*Fig 2.0: U.S. debt as a percentage of GDP*
*(The graph is slightly outdated; current debt is at 102% of GDP)*

- Actually, the U.S. government pays an average interest rate of ~2.5% for its loans. This is because economics doesn't exist in a vacuum. In this case, geopolitics is affecting economics, as U.S. military might, power projection, and stability convinces people to accept incredibly low interest rates on loans to the US.

**Karl Marx (1818-1883)**

- Karl Marx was an old white dude, who is now dead
  - Thus, he was an economist
  - Q.E.D.
- He was also a philosopher, historian, and revolutionary. He spent his life writing books and treatises that criticised the economic systems of the time, pointed out false assumptions, and attempted to rectify them.
- You may know him for *The Communist Manifesto*; economists admire him for *Das Kapital*


*Fig 3.0: Siddharth Taneja didn't make this one. Could you tell?*

**Marx's Definition of Commodities**

- Marx defines a commodity as "Some object that has use value, and has been produced, through the input of human labour, for the purpose of exchange with other private individuals for them to possess" Use value is defined as how much someone covets an item for satisfying their desires (utility). This should not be confused with value, which is the market value (i.e. how much something costs on the market)
- This means that:
  - Stuff that occurs naturally and takes no labour to acquire is not a commodity

- Something absolutely useless: ie, has no utility, is not a commodity
  - Something produced and distributed within a group with no actual exchange of value between individuals is not a commodity
- He then defines the value of a commodity: “As values, all commodities are only definite masses of congealed labour time.” This means that the value of a commodity rests solely on how hard it is to acquire, offering a solution to the diamond water paradox. Of course, a diamond which took less effort to find is not necessarily worth less. The ‘labor time necessary’ is the “socially acceptable labor time”, not that for any individual worker. This is what ensures uniform values in the market.
- An implication of this theory is that Technology, by increasing productivity, devalues a commodity. The classical example of this is salt. At one point, it was worth its weight in gold — in fact, roman legions were paid in salt (hence the word salary as a synonym for wage.) Now, however, it is worth significantly less because technologies allow us to produce it with significantly less labor.

**John Maynard Keynes (1883-1946)**
- Was an awesome, old white dude, who is now dead
  - Therefore also an economist
  - Q.E.D.
- Was so awesome at economics that:
  - He was made a baron by the Queen of England, despite being born a commoner.
  - His policies saved England and the United States from falling into depressions.
  - By virtue of being wildly successful, his policies have been adopted by almost every capitalist economy in the world.

**Subjective Value Theory**
- Keynes proposed the Subjective Value Theorem, which states that the value of any commodity is proportional to how useful it is. There is no property inherent to the object which gives it value, but its value is determined by the circumstances in which it is being consumed. (This is pretty intuitive now that you read it, but prior economists had a heck of a time figuring this out.)
- A consequence of this is that identical objects may have different values. For example:
  - If someone has five bags of wheat, not all of them have equal value.
  - The first bag is the most valuable, because the farmer needs it to live.
  - The second bag is also extremely valuable, because the farmer needs it in order to be able to work effectively.
  - The third bag is still valuable, because the farmer uses it to feed his oxen, but it is less valuable than the first two.

    - The fourth bag the farmer uses to make whisky with. It is valuable because he wants it, but he could do just as well without it.
    - The fifth is essentially valueless. The farmer uses it to feed pigeons in his spare time, but it is not something he particularly needs or wants.
- This is a direct consequence of decreasing marginal utility. (See Lec. 1 notes.)
    - An important concept to get out of this is that utility is not separate from value. If a commodity has no utility and so is useless, that commodity is obviously worthless as well.
- In a free market, competition between individuals seeking to trade the goods they possess for goods they perceive are worth more causes the movement towards equilibrium. Going back to the example of the farmer, if he traded the last bag of wheat to a blacksmith for some horseshoes, it is because the horseshoes are more valuable to him and the wheat is more valuable to the blacksmith. From this exchange you can see how both the blacksmith and the farmer get something that is more valuable to them. Thus, value can be created from the exchange of commodities.
- Production can also be seen as an application of the decreasing marginal utility theorem. Laborers' wages are not set by their subsistence costs, but rather the value of their work to others.
- This theory was made in response to the diamond-water paradox.
    - Essentially, people are not consuming from the supply of all diamonds, or all water, but the diamonds and water available to them, and their respective values are determined by how that group of people view the two commodities, and how useful they are.
        - Although a city dweller might value water less than diamonds, a man dying of thirst in a desert would give away countless diamonds for water
        - Note: Physical utility isn't the only type of utility. Diamonds could be 'useful' because of the social status they offer.
- The market value of a good, under this theorem, is the average value among the people for whom the good is available.

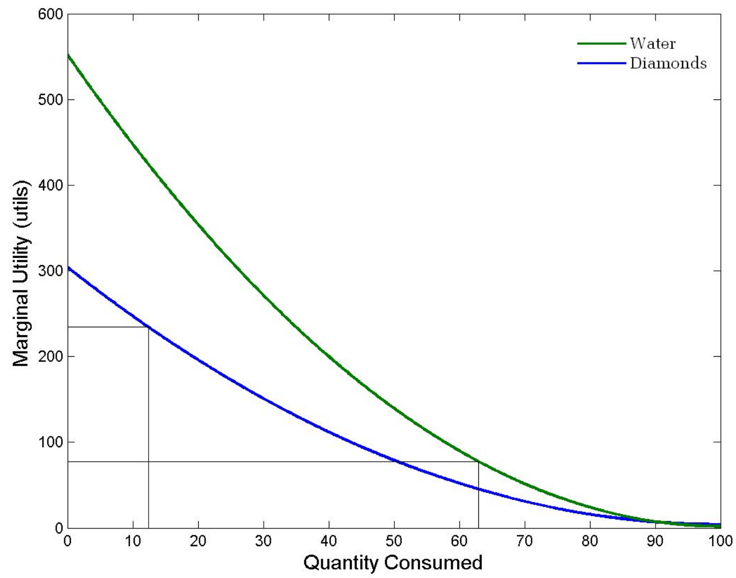


*Fig 4.0: Water is more valuable up to a certain point, then diamonds become more valuable. This point is know as the 'society is ridiculous' point.*

*Important note:*

*If you guys want cooler lectures faster, you should get ahead by using the resources in the email to study. If you do, you can be like this guy:*


*Fig 4.20:*
*A graph of the effect of makeup on Eric Shen's face.*