Intro to Economics

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The Study of Choice

- **<u>Economics</u> is the study of decision making.**
  - While money is a part of economics, the subject as a whole is really about decision making.
- **Every choice has an advantage and a disadvantage.**
  - In economics, we call the advantage of making a decision the <u>benefit</u>.
  - We call the disadvantage of making a choice the <u>opportunity cost</u>.

Costs and Benefits

- **For example, if you decide to go to a movie, there are specific benefits and opportunity costs.**
  - The benefit is the enjoyment obtained from watching the movie.
    - *Other benefits might include the formation of stronger friendships (if you attended with friends), formation of a stronger relationship (if you attended with your boy/girlfriend), etc.*
  - There are opportunity costs too.
    - *Most obvious is the cost of the ticket, and possibly the overpriced popcorn and soda you might have purchased.*
    - *You also probably needed to pay for the gas in the car that got you to the movies, as well as the wear and tear acquired by your car.*
    - *However, other opportunity costs might include:*
      - The money you *didn't* make by working at your job.
      - The calories you *didn't* burn by working out instead.
      - The lower grade you got on your Agribusiness quiz because you *didn't* spend that time studying.

Opportunity Costs

- **Opportunity costs, when considered in their entirety, can be overwhelming.**
  - In fact, it might seem like there is no way that a benefit *could ever* exceed the opportunity cost given all of the things you could never acquire as a result of any given decision.
  - Typically opportunity costs are only viewed as what you are giving up for the *next best decision possible.*
    - *For our movie example, your grade probably wouldn't change much unless the movie was the night before the quiz.*
    - *For working out, you could always make up for that by walking to the movie theater or just postponing your workout until later.*

- **In our movie example, the next best decision was probably working at your hypothetical job.**
  - If this is the next best decision, then the opportunity cost would include the money you didn't make at your job (in addition to the direct costs associated with the movie such as the ticket, gas, popcorn, etc.).
  - The calories you didn't lose and the grade you didn't get wouldn't factor into the determined opportunity cost because they aren't the next best decision in this example.

Rational Choices

- **A <u>rational choice</u> is one where the benefits of a decision outweigh the\opportunity cost.**
  - An irrational choice is one where the opportunity costs are greater than the benefits.

- **There is no such thing as a 'free lunch'.**
  - Every decision has a cost associated with it.
    - *While that cost may not necessarily be a financial one, there is a cost to every decision made.*
  - Every decision will result in something lost, or will result in a potential gain that is never acquired.
    - *No decision will ever be without a cost.*

Scarcity

- **Economic decision making is the result of <u>scarcity</u> and <u>competition</u>.**
  - <u>Scarcity</u> refers to the limitations of the supply of any good or service.
    - *Scarcity helps to determine the cost and benefit of a solution.*
- **For example, if you lived next to a movie theater and could go whenever you want, the scarcity of this resource would be very low.**
  - The lack of scarcity means that the value of attending a movie is not very high.
  - The less scarce a resource, the less valuable it is.
- **However, if you lived far away from any movie theater, the scarcity of attending a movie would be very high.**
  - You would be more likely to choose going to a movie over other options because the value of the movie option is higher due to its availability to you being lower.

Scarcity and Hamburgers

- **A much younger Mr. Kohn was once faced with this kind of situation.**
  - When Mr. Kohn was 12, he could not drive. Mr. Kohn also lived in the geographic center of a place called Nowhere.
  - Because the 12 year-old Mr. Kohn lived in the middle of nowhere, the scarcity of fast-food restaurants was much greater.
  - Because the scarcity of fast food was great, the perceived value of fast food was higher.

- **As a result, the 12 year-old Mr. Kohn was willing to ride his bike for 2 hours one-way to buy a greasy, low-quality hamburger.**
  - Because the availability of fast-food was low, its value seemed higher.
  - Because its value seemed higher, the opportunity cost of biking for 2 hours seemed comparatively lower.
  - For six weeks, young Mr. Kohn rode his bike for four hours per day because the scarcity of hamburgers made it seem worth it.

Economic vs. Intrinsic Value

- **Economic and intrinsic value are not the same thing.**
  - In the previous example, we can probably all agree that fast-food hamburgers have very little value.
    - *Fast-food hamburgers have almost no nutrition, lower the quality of your life, and only taste good at first (especially after biking for two hours).*
  - The economic value of a product is determined by its scarcity and the level of competition for that product.
    - *However, scarcity does not determine the intrinsic value of a product.*
- **Intrinsic value refers to the actual value of a product or service through an analysis of the benefits of its components or features.**
  - Economic value is primarily a product of scarcity, competition, and opportunity cost.

Aaron Rodgers vs. Mr. Kohn

- **The difference between economic and intrinsic value explains why pro athletes make so much more money than public servants.**
  - While teachers and police officers have high intrinsic value, they have comparatively lower economic value.
  - More people are able to become teachers or police officers than are able to become pro athletes.
  - The scarcity of pro athletes is higher than the scarcity of public servants.

- **Another way to consider it: it is easier to find a replacement for a school teacher than it is to find a replacement for Aaron Rodgers.**
  - As it becomes more difficult to replace a professional in a particular job, the amount of money necessary to keep that person in their current position increases (assuming a need for that job).
    - *For the person paying that professional, as the difficulty of replacing that person rises, so does the opportunity cost associated with losing them.*
  - Underpaying a highly valuable employee has an enormously high opportunity cost – not being able to replace that employee with an equally qualified candidate, and preventing a necessary job from being done.
    - *If the Packers don't pay Aaron Rodgers what he is worth, they won't be able to replace him when he leaves.*

Competition

- **Scarcity is not the only factor that determines economic value – <u>competition</u> also is needed to create economic value.**
  - <u>Competition</u> results from the fact that most resources are limited.
  - In order for scarcity to translate into economic value, there has to be competition for the scarce good in question.
    - *For example, a chip shaped exactly like Richard Nixon's head would be very rare but it wouldn't be all that valuable because few if any would compete to get it.*
    - *If someone tried to sell air, it would not work unless air was rare, scarce, and limited.*
- **Knowing that someone else might pay more for a good (and thereby acquire that good) compels a rational person who also wants that good to offer more in exchange for it.**
  - This continues until the opportunity cost of spending that amount of money exceeds the perceived value of that good.

Money

- **<u>Money</u> serves as a unit of value for measuring the relationship between scarcity and competition.**
  - Prior to the existence of money, bartering was necessary.
    - *To <u>barter</u> means to exchange one good (or service) for another good (or service) through individual negotiation.*
  - In bartering, the value of a good must be determined through negotiation in comparison to another good.
    - *For example, if I am trying to buy a cow through bartering, I would have to determine what I have of value to the person selling the cow.*
    - *I would then have to meet that person in order to determine how much of my property that he or she determines is necessary to acquire their cow.*

Fish and Loaves

- **As a way of viewing the difference between money and bartering, consider this example: imagine you fish for a living.**
  - While you can eat the fish you catch every day, it is not enough for a healthy diet.
- **You live next door to a baker. You decide to trade your fish for his bread.**
  - However, the baker does not bake every day, but you need bread every day.
  - Also, the baker might grow tired of your fish and decide to trade for other products such as milk or vegetables.
- **Your fish also may not be acceptable to other vendors.**
  - Perhaps the shoe-maker doesn't eat fish, so you cannot buy shoes from the shoemaker.
- **However, if you, the baker, and the shoemaker all agree that the value of something you sell can be represented by another object, now you can use that object as a way to "hold" the value of something you sold until you need to purchase something else.**
  - This object that "holds" the value of something you sold until you need to buy something is money.
  - This enables you to acquire the things you need with something that will be accepted by everyone at a time that works for you.

A Double Coincidence

- **The problem of bartering is that it requires a "<u>double coincidence</u>".**
  - This means that the sellers of two goods each need the other person's goods in the same amount at the same time.
    - *It would require a coincidence for both parties to need the same thing the other happens to be selling in the same way they are selling it.*
  - Money eliminates the need for a double coincidence by allowing the seller to 'hold' the value of their goods until they need that value, or credit, for another good.

History of the US Dollar

- **The first money used by the Pilgrims was a shell called a wampum.**
  - This shell had already served as money for the Native Americans who were in the area prior to the arrival of the Pilgrims.
- **Over time corn, cod, and tobacco were all used as tender.**
  - Iron nails also worked as tender, although this led to many acts of arson as some burned other people's buildings to steal their nails.
- **It wasn't until 1785 that Congress met and created the US dollar.**
  - They decided to make the dollar green because this color of ink most reduced the risk of counterfeiting.
- **The creation of the dollar allowed the US government to collect taxes (it's pretty much impossible for a government to barter as a means of doing business).**
  - The universality of the US dollar allowed the US economy to grow as more people could now use the sale of their goods to purchase far more items than they could previously.

Economic Institutions

- **The creation of the US dollar in 1785 also allowed for the creation of many kinds of economic institutions. Some of these economic institutions include:**
  - Markets: Markets were established and formalized in order to organize and channel competition for resources.
  - Scarcity of valuable resources ensures that people will compete for goods.
    - *Markets work to ensure that the competition for valuable and scarce goods is regulated, fair, and open.*

Markets

- **Markets are simply a network of interacting exchanges.**
  - By creating consistent and constant exchanges, markets create the establishment of universally recognized value.
- **Without markets, the value of a good or service would be unknown and harder to anticipate.**
  - With regular exchanges in a common setting, the value of a good or service becomes obvious and universally recognized.
  - This encourages buyers to purchase goods or services because they know the cost of that good or service in advance, allowing them to anticipate a purchase and enable it to occur.

Markets and Money

- **For example, imagine you are a Pilgrim in early America.**
  - If you need your boots repaired, you would not know who to seek or what to pay without a commonly used market.
  - The cost of seeking repair of your boots is much higher than the cost for the service alone because you must use time and energy to seek a person, negotiate a price, and see the process to completion.
  - However, if there is a competitive market, the price and service will be clearly advertised in order to attract your business away from others, reducing the effort and time the transaction would otherwise require.

Markets and the Value of Money

- **Markets work to establish the value of money.**
  - When you know that your dollar can buy two cans of coke, one small hamburger, or four packs of gum, the value of goods and services becomes easier to understand because there is a universal system of measurement.
- **The scarcity and competitiveness for a good or service can now be summed by one number: its monetary value.**
  - Without money or markets, every good would have an abstract, immeasurable value, forcing the customer to re-determine the value of a good each time it was exchanged.
  - This would greatly slow economic activity and reduce the availability of almost every good or service.

Money and Property Rights

- **Money depends on, and helps to define <u>property rights</u>.**
  - A legal system must provide a clear definition of property rights in order for an economic system to function.
    - *If someone could just steal your property without any consequence, the perceived value of money would decline.*
    - *This would occur because the opportunity cost of acquiring that money would exceed the opportunity cost of just simply stealing a product.*

- **Without property laws, the value of money would be nothing.**
  - A legal system must both identify who owns a good and also allow for the transference of the rights to that ownership to others.
  - If a legal system can regulate the transfer of ownership of goods, then money holds value because that value is protected by law.

Tragedy of the Commons

- **Without property rights, a phenomenon called "Tragedy of the Commons" would emerge.**
  - The term 'Tragedy of the Commons' results from a situation that would sometimes occur during Medieval times.
- **It was once a common practice for a king or other ruler to provide his subjects with an area in which everyone could graze their cows.**
  - Ultimately, each farmer would put too many cows on the pasture.
  - This would cause the grass to be completely consumed, destroying the entire common grazing area.
- **Tragedy of the Commons occurred because there was no incentive to do the right thing.**
  - If you reduced the number of cows you grazed, the common pasture would still fail as everyone else kept adding more cows.
  - No matter what you did, the end outcome was the same, so why not continue to make the same decisions that ultimately destroy the pasture?

Property vs. TOC

- **Private property eliminates the Tragedy of the Commons phenomena because it provides an incentive for caring for your own property.**
  - The better you care for your property, the more benefits you can acquire from it.
  - The less you care for your property, the fewer benefits you acquire for the cost of owning the property.
- **Private Property eliminates tragedy of the commons by increasing the benefits of doing the right thing and increasing the opportunity cost of doing the wrong thing.**
  - Without the concept of private property that results from having a universal form of money, it is likely that many more resources would be depleted as a result of Tragedy of the Commons.

Money and Corporations

- **Money also allows for the existence of corporations.**
  - A corporation is an artificial "entity" created by economic law.
    - *Corporations are an alternative to personally owning a business or forming a partnership to run a business.*
      - Corporations are businesses that exist apart from one person or a small group of people.
      - The people who run a corporation and the people who own a corporation are different people.
- **Corporations allow a business to exist without depending on one or a couple people, allowing it to continue to exist and grow more effectively.**
  - Corporations are created when a group of people invest their money in a business and elect a board of directors to oversee the operation of that company.
    - *If the company goes bankrupt or fails, you only lose the money you invested (not any other personal property, which you would lose if you personally owned a business or were part of a partnership).*
    - *If a company thrives, you can sell your portion of ownership of that company for more money.*

Money and Banks

- **With a universal system of money, the existence of banks is possible.**
  - A <u>bank</u> is simply a place to store money in order to keep it safe.
    - *Prior to money, systems of bartering limited the ability of banks to exist.*
      - It rarely made sense to store your personal property anywhere but your own home.
- **With the creation of money, banks could now serve a valuable purpose: safeguarding your ability to acquire goods and services.**
  - If you store your money in your mattress at home, you could lose all that money to theft or fire.
  - If you store your money in a bank, you are ensuring your ability to acquire goods and services in the future.
- **Because banks are entrusted with money of others, they can use that money to create credit.**
  - <u>Credit</u> is an agreement between two parties in which a person receives money in advance with an agreement to pay that money back plus a little bit more for the service of receiving money in advance (interest).

Money and Credit

- **Credit is a very valuable economic service because it enables a person to create or acquire a money-making business, service, or skill that they otherwise might not have been able to acquire on their own.**
  - For example, many students acquire loans to pay for college.
  - Most students don't have the money for college prior to going to college.
  - By acquiring a college loan, they can go to college and make more money over the course of their life than if they hadn't gone to college at all.
  - Banks, by serving as a central holding place for money, enable the acquisition of more money in the future by wise investors.

Money and Division/Specialization of Labor

- **An easier access to money as a universal measure of value allows for labor to be divided and specialized.**
  - Prior to the existence of money, almost everyone had to be a farmer in order to acquire the food and clothes necessary for day-to-day life.
    - *The existence of money allows farmers to specialize their production of food and clothing, in effect feeding many more people than themselves in return for money to acquire other products.*
    - *For those not farming, they are now able to produce other goods and perform other services because they can now acquire their food and clothing without producing it themselves.*

Money and Division/Specialization of Labor

- **The option of using money enables allows people to pursue jobs and careers related to the production of goods beyond just the basic needs.**
  - This in turn can make the production of basic needs and services more efficient and more effective by allowing people to specialize in the improvement of producing those goods and services.
  - For example, the use of money and the Industrial Revolution freed some people to develop the tools and equipment that even further reduced the need for people to produce food.
  - Today the average farmer feeds 155 people worldwide; in 1960, the average farmer fed 25.8 people and even fewer were fed per farmer before this.
- **Adam Smith, an early economist, was one of the first to recognize the power of specialization and division of labor.**
  - Smith used the example of the production of sewing pins to prove his point.
  - Smith argued that ten people could produce 48,000 pins per day if the work of pin-production was divided into 18 tasks among those ten people.
    - *This would result in an average production of 4800 pins per worker per day.*
  - However, without the division of labor, a worker would be lucky to produce even one pin per day.
    - *This is because they would have to mine the metals, refine them, create the casts, pour the molten metal, cool the metal, and package the product.*

Money, Trade, and Growth

- **Money promotes <u>International Trade</u>.**
  - Countries can't barter with each other in the same way that people can barter with other people.
    - *With money as an option, goods can be sent thousands of miles away from where they were produced.*
  - This increases the competitiveness for products but also reduces their scarcity, allowing more people to sell products without compromising their income.
    - *This creates more potential for jobs that otherwise wouldn't exist.*

- **Money also promotes <u>Economic Growth</u>.**
  - Economic growth is the change in the capacity of an economy to produce goods and services compared to a different time.
  - Economic growth occurs whenever people who use resources change how those resources are used so that they become more productive or valuable.
  - Money allows people to use products in a way that makes them more valuable by delaying the need to immediately sell that product for other goods or services.
    - *This additional time allows a person to make a product more valuable and worth more in return.*