# 2017-01-10

# **Basic Economic Concepts**

#### What is Economics?

- Economics = the "science" of scarcity
  - **Scarcity** = the premise that resource availability is finite
  - Economic "actors" make decisions on how to allocate resources
    - \* Economics is also called the science of **choices**

#### A Note About This Class

- This class is about Macroeconomics
  - Macroeconomics = an aspect of economics concerned with the higher-level details of how markets operate
    - \* Especially how governments can affect market trends
- Economics(textbook definition) = a social science that deals with how to efficiently allocate scarce resources such that the "actor" in question attains maximum satisfaction
  - Flawed premise?

#### Micro vs Macro

- Microeconomics = an aspect of economics concerned with lower-level details of smaller economic units
  - Examples
    - \* How do specific markets operate?
    - \* How do monopolies affect profit?
- Macroeconomics = an aspect of economics concerned with higher-level details of the entire economy
  - Examples
    - \* How do we best model economic growth?
    - \* How can international trade affect domestic industries?
    - \* How can government spending influence the market?

#### How is Economics Used?

- In economics, the chasm between practical affect and theoretical affect is relatively large
  - Sometimes, economic theories do not have the intended consequences
  - Theoretical Economics = the use of economic methods of analysis to develop a coherent model of an aspect of the economy
  - Policy economics = an economic model in which theories are applied and modified to best seek certain economic outcomes
- Positive Statement = a matter-of-fact statement of what reality consists of
  - Ignores morality and ethics and expectation
- Normative Statements = an assessment of perceived societal ills and how to best address them
  - Less based in practicality-more theoretical

#### Five Economic Assumptions

- 1. People's desires are unlimited, and commodities are scarce
- 2. Because of scarcity, choices must be made
  - In addition, each choice had trade-offs due to opportunity cost
- 3. Actors make decisions to maximize their satisfaction
  - Everyone is fundamentally self-interested
- 4. Decisions are made by comparing **marginal costs** and **marginal benefits** of each prospective option
- 5. Economic situations can be illuminated via simiplified models and graphs

## What are "Marginal" costs and benefits

- Marginal = a term that describes "additional"
  - Think "margin"
- Marginal Analysis = a methodology that relies on comparing value that stands to be created or destroyed as a result of certain actions
  - Think of cost-benefit analysis
- Premise: people will continue to do something until the marginal costs are greater than the marginal benefits

## 2017-01-11

## **Practice Choice**

You want to visit your friend for a week. You will return Sunday night.

You work every weekday earning \$100 per day

There are three flights available - Thursday night flight(\$275) - Friday Early Morning flight(\$300) - Friday night flight(\$325)

#### Trade-offs vs Opportunity Cost

- Trade-offs = all the choices that we don't make
  - All choices have trade-offs, by definition
  - We no longer stand to accrue the value of any of the choices we do not make
- Opportunity cost = the most valuable of all potential trade-offs
  - Kind of a placeholder for the largest sum of value you lose out on by going with the best choice
  - Possible to be used in the plural: opportunity costs
    - \* The most valuable subset of size n of the set of tradeoffs

#### Some Economic Terminology

- Utility = satisfaction
  - Very hedonist definition of utility
  - Philosophers might disagree with that
- Marginal = additional
  - A term that describes values or costs that accrue as a result of making a choice
- Allocate = distribute
  - What marxist nonsense

#### Price vs Cost

- Price = the value that consumers dispense of to obtain a product
  - Price is set by the **producer**
- Cost = the value that producers dispense of to create or refine a product

- Cost is set by the market
- **Investment** = the process by which producers dispense of value to increase production or efficiency
  - Consumer Goods = a product created for providing utility to the consumer
  - Capital Goods = the factors of production
    - \* The utility that **capital goods** provide is used to produce a **consumer good** that is of utility to the **consumer**

#### Four Factors of Production

- 1. Land = a catchall term for capital goods that do not originate from labor
  - Examples
    - Physical land
    - Drinkable water
    - Coal
    - Oil
- 2. Labor = the effort exerted to transform existing consumer goods into capital goods
  - Examples
    - Slave labor
    - Wage workers
- 3. Capital
  - Physical Capital = capital goods that are used to generate consumer goods
  - Human Capital = skills gained through practice
- 4. **Entrepeneurship** = individuals with the ideas and skill to create goods and services that are of value to the consumer
  - Role of Entrepeneurship
    - Takes initiative
    - Innovation
    - Assumes the risk of business ventures
  - Incentive is sweet, sweet **profit** 
    - Profit = Revenue Costs
      - \* **Revenue** = the sum of value obtained by selling the goods produced

## 2017-01-12

## Scarcity

- In order to manage resources requires government
  - Gasp... IT'S SOCIALISM
    - \* Nah more like social democracy
- How are resources allocated differently under capitalism and communism?

## The Three Economic Questions

- 1. What goods and services should we produce?
- 2. How should these goods and services be produced?
- 3. Who consumes the goods and services produced?

#### Political Ideology and the Three Questions

- The answers to *these* questions determines what **economic system** the society operates by
  - Economic System = the methods involved in how production and consumption take place
- Three economic systems
  - 1. Centrally-planned economy
    - Also called a "Command" economy
  - 2. Free market economy
  - 3. Mixed economy
    - What the US and most liberal democracies are

## Centrally Planned Economies

- Characteristics
  - A government entity owns all the resources
  - A government entity answers the three questions
- Why do centrally planned economies face problems of poor-quality goods, shortages, and unhappy citizens?
  - Imperialism
  - Government bureaucracy
  - Apparently no incentive to work hard
    - $\ast$  Classic. Just classic.

#### Free Market Economies

- Laissez Faire = "let it be"
  - Economic principle that the market is self-regulating and government regulation is just inefficient
- **Private property rights** = the legal and moral right to dictate how certain resources that are "owned" can be used and distributed
  - Private property is key
- **Profit-motive** = <del>people</del> entrepreneurs are motivated to create quality products because of **profit**
- Invisible Hand of the Market = pressures exerted on producers because of competition and self-interest
  - Free-market enthusiasts believe those pressures make the market efficient and moral

## **Mixed Economies**

- somewhat of a mix between centrally planned economies and free-market economies
- The system that most modern liberal democracies are
  - Examples
    - \* United States
    - \* United Kingdom
    - \* Canada
    - \* France
    - \* etc

# 2017-01-13

# Production Possibilities Frontier(PPF)

- Also called the  ${f production\ possibilities\ curve}({f PPC})$
- A model of how resources can be allocated to produce commodities
  - Useful for demonstrating scarcity, trade-offs, opportunity cost, and efficiency
- Four assumptions

- 1. There are only two commodities can be produced
- 2. Theoretical 0% unemployment rate
  - Perfect efficiency
- 3. We have a finite, fixed amount of resources
  - Ceteris Paribus = fixed resources
- 4. We have a stagnant amount of technology
  - If technology were changing when we were producing our PPF, then our graft would be shifting constantly

#### Example of PPF

• INSERT GRAPH 1-1 here

#### Economics Based on the PPF

- Each point is a *possible* production scheme
  - If you chose any one point, your **trade-offs** are all the other points
- Efficiency = the line represents perfect efficiency of resource utilization
  - If your production is plotted below the curve, there is present some source of inefficiency
    - \* Unemployment, etc
  - If your production is plotted above the curve, then you are high
    - \* It is by definition *more* than perfectly efficient, which isn't possible
- Opportunity  $\cos t$  is represented by the slope of the curve at any given point
  - Constant opportunity cost = a situation wherein the ppf is a straight line
  - Law of Increasing Opportunity Cost = a theorem that stipulates
    that in most ppf curves, the opportunity cost(slope of the line)
    increases in magnitude
    - \* Think of the bowed curve; the "negative-ness" of the slope constantly increases
    - \* Resources do not linearly transfer between the requisites for producing two commodities
      - · What if the resources are *currency*?
      - · Commodity A costs some amount x per unit
      - · Commodity B costs some amount y per unit
      - . The linear rate of exchange between A and B should just be the ratio  $\frac{x}{y}$

#### How Can the PPF Shift?

- 1. Change in the quantity of resources or the efficiency by which we can use existing resources
- 2. Change technology—extract resources more efficiently, produce more efficiently
- 3. Trade
  - If two countries have different optimal points, they can trade to make each other better off
  - Trade balance is typically in favor of those who produce capital goods

## 2017-01-17

## Types of Efficiency

- **Productive efficiency** = the extent to which the productive capacity of a society is being fully utilized
  - All points along the **ppf** are equally productively efficient
- **Alocative efficiency** = the extent to which the permutation of production possibilities aligns with what the society at large desires
  - If a point isn't along the **ppf**, then it is not efficient in the productive or allocative capacity

# 2017-01-18

#### Trade

#### Why Do People Trade?

- In general, **people** trade so that they can obtain goods they either don't have the means to produce themself or possess a high opportunity cost for producing it themself
- In economics, people become **specialized** in labor
  - Different people are good at different things
  - As result people do what they're best at and then they trade
  - Supposedly, trade increases human welfare for both parties
    - \* Unless you're a third world country

## Absolute and Comparative Advantage

- Per unit Opportunity Cost = basically just the opportunity cost per unit produced
- Absolute Advantage = a disparity in productive efficiency pertaining to some product
  - With respect to output, the nation with the highest output has the absolute advantage
  - With respect to input, the nation that can produce a unit of product using the fewest resources has the absolute advantage
- Comparative Advantage = a disparity in per unit opportunity cost pertaining to some product
  - The idea is that each nation should produce for what their opportunity cost is lowest
  - With respect to output, the nation with the lowest per unit opportunity cost has the comparative advantage
- Which is more important: **absolute** or **comparative** advantage?
  - It depends on the circumstances
    - \* If production *efficiency* is desired, then nations should specialize to produce the product they have the **comparitive advantage** for
    - \* If production *quantity* is desired, then nations should specialize to produce the product they have the **absolute advantage** for
      - $\cdot$  e.g. Wartime arms production: the nation's safety is on the line