AP Dojo

AP Macroeconomics

Unit 1 Cheat Sheet

Factors of Production

ALL **resources** can be classified as one of the following four factors of production:

1. **Land** -All **natural resources** that are used to produce goods and services. (Ex: water, sun, plants, animals)
2. **Labor** -Any effort a person devotes to a task for which that person is paid; **workforce** (Ex: manual laborers, doctors, teachers, waiters, etc.
3. **Capital** -
    - **Physical Capital** - Any human-made resource that is used to create other goods and services (Ex: tools, tractors, machinery, buildings, factories, etc.)

- **Human Capital -** Any skills or knowledge gained by a worker through education and experience

4. **Entrepreneurship -** ambitious leaders that combine the other factors of production to create goods and services.
   - ❖ Ex: Henry Ford, Bill Gates, Inventors, Store Owners, etc.
   - ❖ Entrepreneurs take the initiative, innovate, and are "**risk-takers**" in order to make a **PROFIT**

Economic Systems

Every society must answer the 3 basic economic questions?

1) **What** goods and services should be produced?
2) **How** should these goods and services be produced?
3) **Who** consumes these goods and services?

The way these questions are answered determines the economic system

Economic system is the method used by a society to produce and distribute/allocate goods and services.

1. **Centrally Planned (Command) Economy-**
   - government owns all the resources
   - central authority answers the 3 economic questions

Ex: Cuba, North Korea, former USSR

Why do centrally planned economies face problems of poor-quality goods, shortages, and unhappy citizens?

- **Little incentive to work harder** and central planners have a hard time predicting preferences

2. **<u>Free Market System (aka: Capitalism)</u>**
   - Little government involvement in the economy. (***Laissez Faire*** = Let it be)
   - Individuals OWN resources and answer the three economic questions.
   - The opportunity to make PROFIT gives people INCENTIVE to produce quality items efficiently.
   - Wide variety of goods available to consumers.
   - Competition and Self-Interest work together to regulate the economy (keep prices down and quality up).

   - **The End Result: Most efficient production of the goods that consumers want, produced at the lowest prices and the highest quality.**

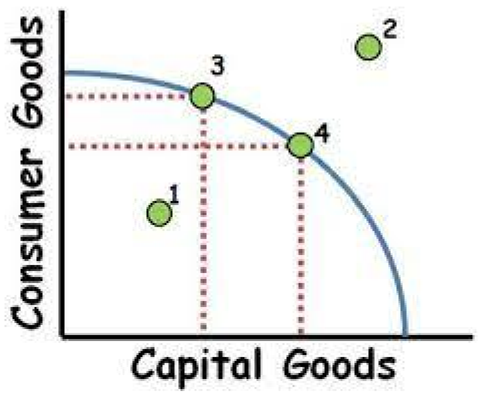
Adam Smith's <u>Invisible Hand</u> Theory: The concept that society's goals will be met as individuals seek their own self-interest. Competition and self-interest act as an invisible hand that regulates the free market.

<u>3. Mixed Economies</u> - A system with free markets but also some government intervention.

❖ Almost all countries, including the US, have mixed economies

Production Possibility Curves

A **production possibilities curve** (PPC) is a model that shows alternative ways that an economy can use its scarce resources



Team 1: Calculus Quiz Team (10 players)
Team 2: Algebra Quiz Team (10 players)

If the teams are similar, we can switch players without losing much (low opportunity cost)

Team 1: Calculus Quiz Team (10 players)
Team 2: Art History Quiz Team (10 players)

If the teams are different, switching players will lead us to lose out on a lot (high opportunity cost)

Law of increasing opportunity costs states that as production switches from one product to another, increasingly more resources are needed to increase the production of the second product, which causes opportunity cost to rise

- **PPC has a concave (bowed-out) curve**

Example:

Constant Opportunity Cost - Resources are easily adaptable for producing either good.
Result is a straight line PPC (not common)

- **PPC has a straight line**

3 Changes can Cause the PPC to Shift Right
PPC can shift outward to the right showing long term economic growth:

1. **Increase productive resources** (quantity or quality)
   - F.O.P: land, labor, **capital** (physical & **human capital**), entrepreneurship
2. **New technology** = efficiency & productivity
3. **International Trade*** (based on Comparative Advantage)

International Trade, Comparative Advantage Absolute Advantage (IMPORTANT)

Because each nation has certain productive resources & cannot produce everything it wants, individuals, businesses, & nations must decide what goods & services to focus on

- **Specialization** – a situation that occurs when individuals or businesses produce a narrow range of products to **maximize resources,** increase **productivity,** & make a **profit**
- **Economic interdependence** – a situation in which producers in one nation depend on others to provide goods & services they don't produce (opposite of **isolationism)**

Absolute Advantage: a country can produce more units of a good given the same resources

- On output problems, higher number signals absolute advantage

Comparative Advantage: a country can produce a good at a lower opportunity cost'[;\]/

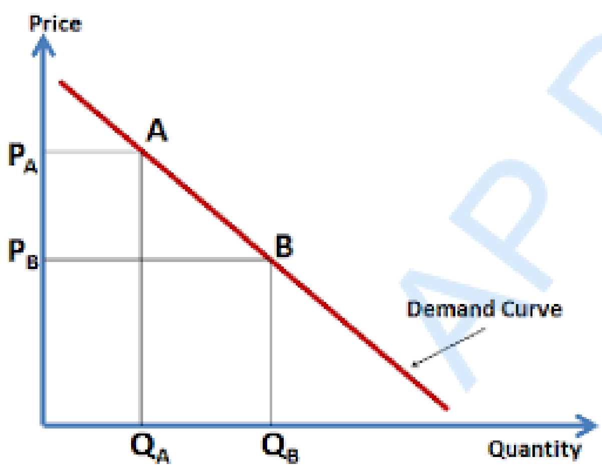
- To determine comparative advantage, you must find out how much of Good Y the country could have produced with the resources it took them to produce Good X

	WHEAT	POTATOES
CHINA	**100** 1 Wheat = 2 Potatoes	**200** 1 Potato = 0.5 Wheat
INDIA	**80** 1 Wheat = 1.25 Potatoes	**100** 1 Potato = 0.8 Wheat

Terms of Trade: a rate at which one good can be exchanged for another.
- If the US produces TVs and China producer phones, how many phones should be produced

Supply and Demand

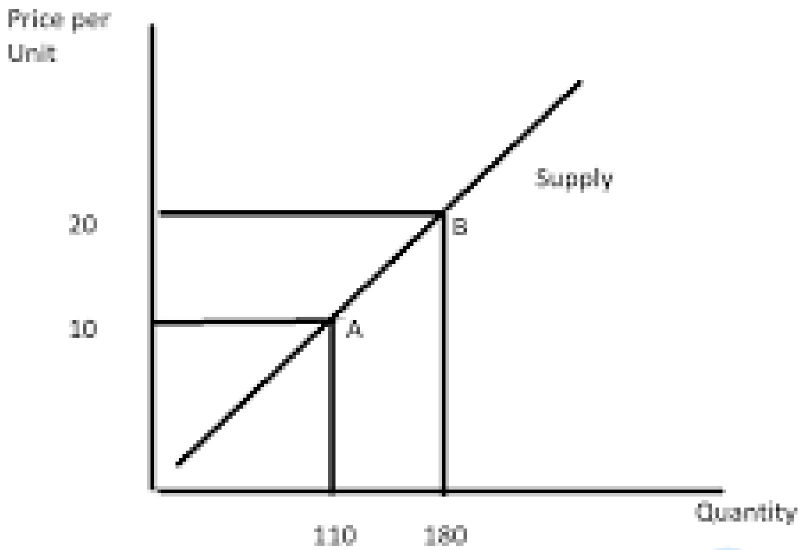
Demand: the different quantities of goods and services that consumers are willing and able to purchase at various price levels.



Quantity Demanded: the number of people that are willing and able to buy a good or service at a certain price

- Changes in price cause changes in quantity demanded

Supply: the different quantities of goods and services that producers are willing and able to sell at various price levels.



<u>Quantity Supplied</u>: The number of producers that are willing and able to sell a good or service at a certain price

- Changes in price cause changes in quantity supplied

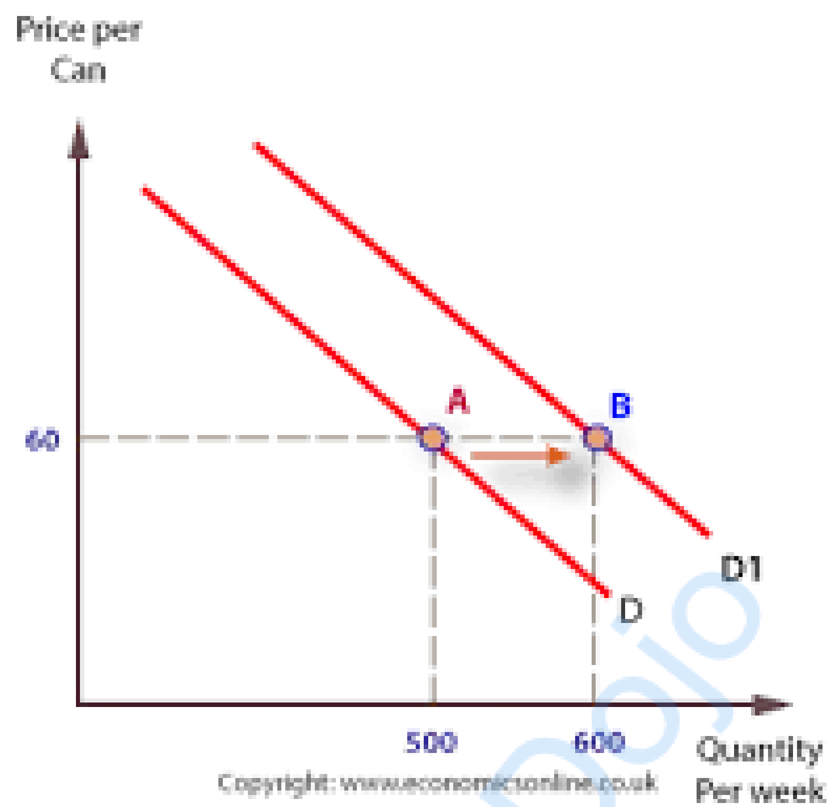
<u>The Law of Demand</u>: states that the relationship between the price level and the **quantity demanded** of a good or service is inverse. As the price level rises, consumers are less willing or less able to purchase the same quantity, and, therefore, buy less. As the price level falls, consumers are more willing or more able to purchase a greater quantity, and, therefore, buy more.

<u>The Law of Supply</u>: states that the relationship between the price level and the quantity demanded of a good or service is direct, or positive. As the price level rises, firms are more willing or more able to produce a greater quantity, and, therefore, produce more. As the price level falls, firms are less willing or less able to produce the same quantity, and, therefore, produce less

<u>Shifting the Supply / Demand Curve</u>:
- Increases: rightward shift
- Decreases: leftward shift

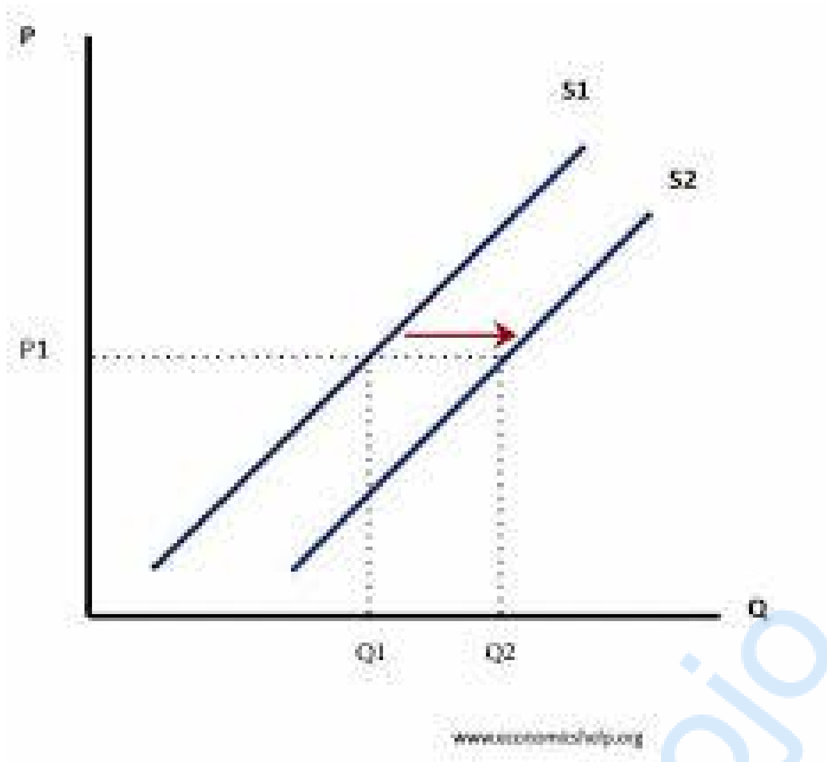
<u>Non-Price Determinants of Demand</u>: factors other than price that can alter the demand for a product or service

- I = **Income**
- N = **Number of Buyers/Consumers**
- S = **Substitutes**
- E = **Expectations of Future Price**
- C = **Complements**
- T = Tastes and Preferences



<u>Non-Price Determinants of Supply:</u> factors other than price that can alter the demand for a product or service

- R - Resources
- O - **Other good prices**
- T - **Taxes**
- T - **Technology**
- E - **Expectations of the supplier**
- N - Number of Competitors



<u>Equilibrium</u>: the point at which supply and demand are equal

- Can be found where the supply and demand curve intersect
- Need to be able to identify the equilibrium price (Pe) and equilibrium quantity (Qe)
- Need to be able to explain how situations (like an increase in population) will shift supply or demand and how the shift(s) will impact equilibrium price and quantity