Economics Notes

Chapter 2:

Production Possibilities and Opportunity Cost:

-Production possibilities frontier (PPF) are the boundaries between those combinations of goods and services that can be produced and those that cannot

-PPF gives the limits of production of whatever two goods, cola and pizza, given the total resources and technology to produce them

-PPF curves allow us to see what is attainable and what is not when we are comparing the sales of the two goods

-Unattainable wants are wants that cannot be achieved

Production Efficiency:

-We achieve production efficiency if we produce goods and services at the lowest possible cost

-This outcome occurs on all points *ON* the PPF

-All points inside the PPF are inefficient because we are giving up more than necessary of one good to produce a given quantity of the other good

-Production inside the PPF is inefficient because they are either unused or misallocated, or both

-Resources are unused when they are idle, and misallocated when they are assigned a task when they are not the best match

Chapter 4:

Elasticity:

-When the price of a good increases, the quantity demanded for said good decreases

-Positive change in price brings a negative change in the quantity demanded, price elasticity of demand is a negative number

-Only use the magnitudes for measurements of elasticity, disregard the negative sign

Inelastic and Elastic Demand:

-If the price of a good changes but the quantity demand remains constant, that good is said to have **perfect inelasticity** (ex. Insulin. Insulin is so important that if the price of it rises/falls, the quantity demand remains the same because diabetic people HAVE to purchase it)

-Percent change in the price of a good is the exact same as the percent change in the quantity demanded, said good has a **unit elastic demand**. Price elasticity = 1
-**Inelastic demand**s occur when the percent change in price is higher than that of the quantity demand (foods and shelter are examples of inelastic demand)
-If the quantity demanded changes by an infinitely large percent because of a tiny price change of a good, that good has a **perfectly elastic demand**. (ex. Two pop machines side by side, pepsi is more expensive by $.20 in one machine. People are more likely to drink the cheaper pepsi)
-**Elastic demand** is when the price elasticity of demand is greater than 1 (automobiles and furniture)

The Factors That Influence The Elasticity of Demand:
-**Elasticity of demand for a good depends on**: closeness of substitutes, proportion of income spent on the good, time lapsed since the price change
Closeness of Substitutes
-Closer the substitutes the more elastic is the demand
-There are no substitutes for gas/oil, therefore they are inelastic
- Plastics are very close to metals, therefore metals are elastic
-Necessities have poor substitutes(inelastic demand) and luxuries have great substitutes(elastic demand)
Proportion of Income Spent on the Good
-The greater the proportion of income spent on a good the more elastic the demand for it is
Time Elapsed Since the Price Change
-The longer the time elapsed since a change in price, the more elastic the demand
-Price of gas in the 70's, more gas efficient vehicles on the market as time passed, less gas bought because of better engines caused the rice to return to a normal rate

Elasticity Along a Linear Demand Curve:
-Price elasticity of Demand = (Change Quantity/Average Quantity)/(Change Price/Avg Price)

Total Revenue and Elasticity:
-The total revenue from the scale of a good equals the price of the good multiplied by the quantity sold
-Price change means that the total revenue will also change
-Cut in price does not always mean change in total revenue
-If the demand is elastic, a 1% price cut increases the quantity sold by more than 1%, and total revenue increases

-If demand is inelastic, 1% price cut increases the quantity sold by less than 1%, total revenue decreases
-If demand is unit elastic, a 1% price cut increases the quantity sold by more than 1%, and total revenue does not change
-The total revenue test is a method of estimating the price elasticity of demand by observing the change in total revenue that results from a change in price, when all other influences on the quantity sold remain the same
-Price cut raises the total revenue, demand is elastic
-Price cut decreases the total revenue, demand is inelastic
-Price cut leaves total revenue unchanged, demand is unit elastic

Income Elasticity of Demand:
-Income elasticity of demand is a measure of of the responsiveness of the demand for a good or a service to change in income, other things remaining the same
-Income elasticity of demand=(% change in Quantity Demanded / % change in income)
Different ranges of income elasticities:
-Positive and greater than 1(normal good, income elastic)
-Positive and less than 1(normal good, income inelastic)
-Negative (inferior good)
-If the demand for a good is income elastic, the percentage of income spent on that good increases as income increases
-If the demand for a good is income inelastic, the percentage of income spent on that good decreases as income increases

Cross Elasticity of Demand:
-Measure of the responsiveness of the demand to a change in the price of a substitute or compliment, other things remaining the same
Cross elasticity of demand = (% change in quantity demanded / % change in price of substitute or compliment)
-If the cross elasticity of demand is positive, demand and the price of the other good change in the same direction, so the two goods are substitutes
-Cross elasticity of demand is negative, demand and the price of the other good change in opposite directions, so the two goods are complements

Chapter 5

Resource Allocation Model:
-Eight alternative methods for allocating scarce resources are: market price, command, majority rule, contest, first come first serve, lottery, personal characteristics, and force.

Market Price: raising the price of a resource allocates it because only certain people are willing/can pay the new price. Those who don't either simply choose not to, or can not afford it. Resources such as education or medical care are always allocated using a different method so everybody can afford it.

Command: A command system allocates resources by the order of someone in authority (eg. Government). Command allocations are useful in organizations in which the lines of authority and responsibility are clear, but for any other cases the command system does not work efficiently.

Majority Rule: This method allocates resources in the way the majority of people vote on them. Such as an election for a representative government that make some of the biggest decisions. Majority rule decides how tax dollars are allocated among competing uses such as education and healthcare.

Contest: A contest will allocate resources to the winner. When the head of a company offers the opportunity to win a prize, people in said company will tend to work harder in order to win the prize. Only a certain amount of people will win the said prize, but the others competing will have been more motivated to do the work they were assigned better and more efficiently.

First Come, First Served: Allocates resources to those who are first in line. Restaurants for example may not take reservations and use a first come, first served method for allocating their customers. Highway ramps use the same method. This method works best when a scarce resource can serve just one user at a time in a sequence.

Lottery: Resources will be allocated to a random draw winner, such as a lottery ticket, or drawing a lucky card. Starting positions in marathons, or landing slots on an airstrip. Lotteries work best when there is no distinguishable way to effectively select among potential users of a scarce resource.

Personal Characteristics: People with the "right" characteristics will get allocated the resource. Marriage partners is a good example of personal characteristics. Personal characteristics are also used in a very negative way, such as discriminating a certain person because of colour, race, gender etc..

Force: The use of force in allocating resources for war. Theft, taking something from someone that is not yours is an example of the force method for resource allocation. Force can be used in a very positive manner as well, transferring wealth from the rich to the poor is an example of positive force. Without courts to enforce contracts, business would not be possible

Benefit, Cost, and Surplus:
-Resources are allocated efficiently and in the social interest when they are used in the ways people value most highly
-This outcome occurs when the quantities produced are at the point on the PPF at which marginal benefit equals marginal cost.

Demand, Willingness to Pay, and Value:
-Value is what we get, and price is what we pay
-The value of one more unit of a good or service is its marginal benefit
-Measure marginal benefit by the maximum price that is willingly paid for another unit of the good or service
-A demand curve is a marginal benefit curve

Individual Demand and Market Demand:
-Relationship between the price of a good and the quantity demanded by one person is called the individual demand.
-Relationship between the price of a good and all the buyers interested is known as the market demand.
Consumer Surplus:
-Consumer surplus is the excess of the benefit received from a good over the amount they paid for it.
Consumer Surplus: (value of a good - price of good) / (quantity bought)

Supply and Marginal Cost:
-Firms are in business to make a profit, to do so they must sell their output for a price that exceeds the cost of production

Supply, Cost, and Minimum Supply-Price:
-Cost is what a firm gives up to produce a good or service
-Price is what the firm makes back as profit from said good or service
-The cost of producing one more unit of the good/service is its marginal cost (the minimum price that producers must receive to induce them to offer one more unit of good/service for sale)

-A supply curve is a marginal cost curve

Individual Supply and Market Supply:
-Relationship between the price of a good and the quantity supplied by one producer is individual supply
-Relationship between the price of a good and the quantity supplied by numerous producers is the market supply
-We call societies marginal cost the marginal social cost
-Market supply curve = marginal social cost (MSC) curve

Producer Surplus:
-When price exceeds marginal cost, the firm receives a producer surplus
-The excess of the amount received from the sale of a good or service over the cost of producing it
Producer Surplus: (price receive - marginal cost) / (quantity sold)

Efficiency of Competitive Equilibrium:
-Equilibrium in a competitive market occurs when the quantity demanded equals the quantity supplied at the intersection of the demand curve and the supply curve
-At this intersection point, marginal social benefit on the demand curve equals marginal social costs on the supply curve
-In equilibrium, a market achieves allocative efficiency
-Total surplus is the sum of consumer surplus and producer surplus
-When the efficient quantity is produced, total surplus is maximized
Market Failure:
-Markets are not always efficient, and when a market is inefficient, we call the outcome market failure
-Too little production (under production), too much production (over production)

Underproduction: We measure the scale of inefficiency by deadweight loss, which is the decrease in total surplus that results from an inefficient.

Overproduction: Inefficient production creates a deadweight loss that is borne by society: it is a social loss.

Sources of Market Failure:
Obstacles to efficiency that bring market failure are:

Price and Quantity Regulations: A price regulation (price cap/price floor), blocks the price adjustments that balance the quantity demanded and the quantity supplied and lead to underproduction. A quantity regulation that limits the amount that a farm is permitted to produce also leads to underproduction.

Taxes and Subsidies: Taxes increase the prices paid by buyers, lower prices received by sellers, and lead to underproduction. Subsidies, which are payments by the government to producers, decrease the prices paid by buyers, raise prices received by sellers, and lead to overproduction.

Externalities: An externality is a cost or benefit that affects someone other than the seller or buyer. An external cost arises when an electric utility burns coal and emits carbon dioxide. Result is overproduction. External benefits arises when an apartment owner installs a smoke detector and decreases her neighbours fire risk. Result is underproduction.

Public Goods and Common Resources: A public good is a good/service from which everyone benefits and no one can be excluded. National defence is an example. A common resource is owned by no one but is available to be used by everyone. Atlantic salmon is an example.

Monopoly: A monopoly is a firm that is sole provider of a good/service. Local water supplies and cable television are examples of monopolies. A monopolies self interest is to maximize its profit, and because it has no competitors, it raises its prices and lowers the production
High Transaction Costs: Buying a house means that you will have to also buy the service of a lawyer and an agent to do the transaction.

Is the Competitive Market Fair?:
Utilitarianism is a principle that states that we should strive to achieve “the greatest happiness for the greatest number”.
-Jeremy Bentham and John Stuart Mill are utilitarians
-Utilitarians believes that the rich and the poor should all share their money so everyone has an equal share of wealth, no one would be poor but no one would be rich
-Robert Nozick, a economics philosopher, argues that the idea of fairness as an outcome or result cannot work and that fairness must be based on the fairness of the rules

-He suggests that fairness obeys two rules: (1) the state must enforce laws that establish and protect private property, and (2) private property may be transferred from one person to another only by voluntary exchange
-These rule satisfy the symmetry principle, if not followed, the principle is broken

Chapter 6

A Housing Market with A Rent Ceiling:
-A price ceiling/price cap is a government regulation that makes it illegal to charge a price higher than a specified level
-Depending on whether or not the price ceiling is above or below the equilibrium price there can be some issues
-Above equilibrium price there are no effects because the ceiling price does not constrain the market forces
-Price ceilings below the equilibrium price has powerful effects on a market because the price ceiling attempts to prevent the price from regulating the quantities demanded and supplied
-A rent ceiling is a price applied to a housing market, a rent ceiling below equilibrium can cause housing shortages, increased search activity and a black market

A Housing Shortage:
-At the equilibrium price, the quantity demanded equals the quantity supplied
-In a housing market, when the rent is at equilibrium there is neither a shortage nor a surplus of housing
-Below the equilibrium will cause a shortage of houses being supplied
-When there is a shortage, the quantity available is the quantity supplied

Increased Search Activity:
-Increased search activity is an allocation method used when there are not enough houses available on the market
-The time spent looking for someone to do business with is called search activity
-The opportunity cost is not only the price, but also the time invested in finding an apartment/house

A Black Market:
-A black market is an illegal market in which the equilibrium price exceeds the price ceiling
-The level of black market renting depends on how tightly the rent ceiling is in force

Inefficiency in a Rent Ceiling:

-A rent ceiling below the equilibrium rent results in an inefficient underproduction of housing services

-The marginal social benefit of housing exceeds its marginal social cost and a deadweight loss shrinks the producer and consumer surplus

Are Rent Ceilings Fair?:

-Some possible mechanisms for allocating scarce housing is: first-come first-served, lottery, and discrimination

-A lottery allocates houses to those who are lucky, social status does not have any effect

-A first come first served allocation supplies the house/appartment to the person who has their name on the list first

-Discrimination allocations are based on the views and self interests of the owner of the housing

-Discrimination based on friendship, family ties or criteria such as race, ethnics and sex is more likely to be a deciding factor for the salesman

-Although discrimination is illegal, there is no way to prevent it from occurring

A Labour Market with a Minimum Wage:

-Firms decide how much labour to demand, and the lower the wage rate, the greater is the labour quantity demanded

-A price floor is a government regulation that makes it illegal for someone to charge a price lower than a already specified price

-The effects of a price floor, like a price ceiling, depend only on if it is above or below the equilibrium price

-A price floor set below equilibrium has no effect because it does not constrain the market forces

- When a price floor is set to a labour market, it is called minimum wage

-Minimum wage that is set above the equilibrium wage will create unemployment

Minimum Wage Brings Unemployment:

-In a labour market, when the minimum wage is equal to the equilibrium wage, the quantity of labour supplied equals the quantity of labour demanded

-At a wage rate above the equilibrium wage, the quantity of labour supplied exceeds the quantity of labour demanded (surplus of labour)

Is the Minimum Wage Fair?:

-The minimum wage is unfair on both views of fairness: it delivers an unfair result and imposes an unfair rule
-The result is unfair because only people with jobs and that can keep them benefit from the wage
-The minimum wage imposes an unfair rule because it blocks voluntary exchange

Inefficiency of a Minimum Wage:
-In the labour market, the supply curve measures the marginal cost of labour to workers
-The demand curve measures the marginal social benefit of labour
-The minimum wage frustrates the market mechanism and results in unemployment and increased job search

Taxes:
-Employers pay social security taxes such as the Employment Insurance tax for their workers
-Items such as tobacco, alcohol and gas are taxed every time they sell something

Tax Incidence:
-Tax incidence is the division of the burden of tax between buyers and sellers
-If the price paid by buyers rises by the full amount of the tax, then the burden of the tax falls entirely on buyers, therefore they pay the tax
If the price paid by buyers rises a lesser amount than the tax, then the burden falls partially on the seller and partially on the buyer
-If the price paid by buyers does not change at all, then the burden is 100% on the seller

A Tax on Sellers:
-A tax on sellers is like an increase in cost, so it decreases the supply

Chapter 12

What is Perfect Competition?
-Perfect competition is a market in which: many firms sell identical products to many buyers, there are no restrictions on entry into the market, established firms have no advantage over new ones, and that sellers and buyers are well informed about prices
-Industries such as farming, wood pulping and paper milling are all examples of extremely competitive markets

How Perfect competition Arises?

-If the minimum efficient scale of a single producer is small relative to the market demand for the good or service will result in perfect competition

-With these circumstances there is room in the market for many firms

-Minimum efficient scale is the smallest output at which long-run average cost reaches its lowest level

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