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Econ Chapter 3: Supply and Demand: Theory

3-1) Demand: The willingness and ability of buyers to purchase different quantities of a good at different prices and during a specific period.

- Unless both willingness and ability to buy are present, there is no demand nor a buyer.

Market: Any place people come to trade.

- Has two sides: 1.) Buying side 2.) Selling side
  - Demand Side = Buying side of market
  - Supply Side = Selling side of market

Law of Demand: As the price of the good rises, the quantity demanded of the good falls, and as the price of the good falls, the quantity of the goods rises, ceteris paribus.

P↑ Q↓ P↓ Q↑

Quantity Demand: The # of units of a good that individuals are willing ~~to~~ and able to buy at a particular price during a particular period.

- If people are willing and able to buy 100 TVs per week at $400 per tv, the 100 units is the quantity demand of TVs at $400 per tv.
  - Quantity demand more specific than ~~[illegible]~~ regular demand.

Four Ways to represent the Law of Demand

1.) In Words: ("as the price of a good rises, the quantity demand falls")

2.) In Symbols: P↑ Q↓

3.) Demand Schedule: Numerical presentation of the law of demand

4.) A Demand Curve: The graphical representation of the inverse relationship between price and quantity demanded specified by the law of demand.

- A picture of the law of demand.

Why does quantity demanded move in the direction opposite that of price?

1.) People substitute lower priced goods for higher priced goods.

2.) Law of Diminishing Marginal Utility: Over a given period, the marginal utility or satisfaction gained by consuming equal successive units of a good will decline as the amount of the good consumed increases. (We obtain less satisfaction from additional units of goods)

- The more satisfaction you get from a unit of a good, the higher the price you are willing to pay for it, vice versa

Individual Demand Curve vs. Market Demand Curve

- Individual demand curve represents ~~an [illegible]~~ the price-quantity combinations of a particular good for CDs, Market demand curve shows all buyers.

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- Market Demand Curve is derived by "adding up" individual demand curves

Change in Quantity Demand vs. Change in Demand

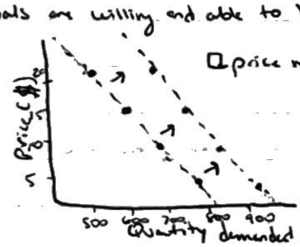
- Only thing that will change quantity demanded is its price.
- Change in Quantity Demand: A movement from one point to another point on the same demand curve that is caused by a change in the price of the good.

Own Price: The price of a good

Change in Demand: Change - or shift - in the entire demand curve.

What does increase in demand mean?

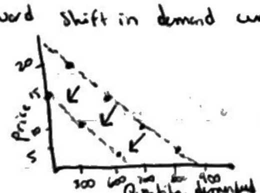
- Individuals are willing and able to buy more units of the good at each and every price
  - Whereas individuals were willing and able to buy 500 units of the good at $20, now they are willing and able to buy 600 units of the good at $20
- Increase in demand is represented by a rightward shift in the demand curve and means that individuals are willing and able to buy more of a good at each and every price



price remains same but demand increases

Decrease in Demand: Individuals are willing and able to buy less of a good at each and every price

- Leftward shift in demand curve



What Factors Cause the Demand Curve to Shift?

- Income
  - Normal Good: A good for which demand rises (falls) as income rises (falls)
  - Inferior Good: A good for which demand falls (rises) as income rises (falls)
  - Neutral Good: A good for which demand does not change as income rises or falls
- Preferences
  - Change in preference in favor of a good shifts the demand curve rightward
- Prices of Related Goods

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<u>Substitutes</u>: Two goods are substitutes if they satisfy similar needs or desires.

- Ex. Coke and Pepsi
  - As the price of one ~~falls~~ rises, the demand for the other rises.
    - Higher Coca Cola prices will increase the demand for Pepsi

<u>Complements</u>: Two goods are complements if they are consumed jointly.

- Ex. Tennis rackets and balls, gas and cars
  - As the price of one falls, the price of the other falls.

<u>Number of Buyers</u>

- More buyers = higher demand
- Fewer buyers = lower demand

<u>Expectations of Future Prices</u>

- Buyers who expect the price of a good to be higher next month may buy it now, thus increasing the current (or present) demand for the good.

<u>Movement Factors and Shift Factors</u>

- Economists distinguish between (1) factors that can bring about movement along curves and (2) factors that can shift curves
  - <u>Movement Factors</u>: Factors that cause movements along curves (only moves when change in goods own price)
  - <u>Shift Factors</u>: Income, preferences, the price of related goods, etc.
    - Shift factors rarely present on demand curves

3-2) <u>Supply</u>: The willingness and ability of sellers to produce and offer to sell different quantities of a good at different prices during a specific period.

<u>Law of Supply</u>: As the price of a good rises, the quantity supplied of the good rises, and as the price of a good falls, the quantity supplied of the good falls.

<u>Upward Sloping Supply Curve</u>: The graphical representation of the law of supply.

- When there is NO Time to produce more or when no more can be produced the law of supply does not hold.

- A higher price is an incentive to producers to produce more of the good.
  - This explains the upward sloping supply curve.
    - Costs rise when more units of a good are produced.

<u>Supply Schedule</u>: The numerical tabulation of the quantity supplied of a good at different prices. Numerical representation of law of supply.

<u>Supply Curve Shift</u>: If more product is produced at same cost, curve shifts right.
If less product is produced at same cost, curve shifts left

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What causes Supply Curve to Shift

1.) Prices of Relevant Resources

- If resources needed to produce something fall in price, more of that resource is used to manufacture item/good and thus the supply curve shifts right.

2.) Technology

- If new technology allows for reduction of per-unit production costs, the quantity supplied of the good at each price will increase.

3.) Prices of Other Goods

- Change in the price of one good can lead to a change in supply of another good.

4.) # of sellers

- If more sellers begin producing a good, ~~the~~ perhaps because of high profits, the curve will shift right. Shifts left if some sellers stop producing a good, perhaps due to losses.

5.) Expectations of Future Price.

- Current supply curve shifts left because sellers will hold off on selling their goods if there is expected to be an increase in price of that good.

6.) Tax and Subsidies

- Taxes cause increases in per-unit costs and thus the curve shifts left.
  - If tax is eliminated curve shifts right.

Subsidies: A monetary payment by government to a producer of a good or service.

- We get more of what we subsidize and less of what we tax
  - Subsidy leads to rightward shift in curve.

Government Restrictions

- Sometimes government acts to reduce supply
  - U.S. import quota - quantitative restriction on foreign goods - Japanese television sets
    - The quota reduces the supply of Japanese tv sets in the U.S. and shifts curve leftward.
- Licensure has similar effect

Change in Supply vs. Change in Quantity Supplied

- A change in supply is a shift in the supply curve
  - ~~The~~ Saying that the supply of oranges has increased is the same as saying that the supply curve for oranges has shifted rightward.
    - Factors that can change supply/supply curve: prices of relevant resources, prices of other goods, # of sellers, expectations of future prices, taxes and subsidies, and government restrictions
- A change in quantity supplied refers to movement along supply [redacted] curve
  - Factors that can change quantity supplied of a good: Prices of that good.

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Supply and Demand at Work

~~[illegible]~~

- If the quantity supplied is greater than the quantity ~~demanded~~ supplied, a surplus, or excess supply, exists.
- If the quantity supplied is less than the quantity ~~demanded~~ supplied, a shortage, or excess demand, exists
- Equilibrium Price: The price at which the quantity demanded = quantity supplied
  - Also referred to as Market-Clearing Price
    - The quantity that corresponds to the equilibrium price is the equilibrium quantity
- Disequilibrium Price: Any price at which quantity demanded is not equal to quantity supplied.
- $Q_d = Q_s \rightarrow$ Equilibrium

What to do if Surplus / Shortage?

- If Surplus, lower price
- If Shortage, higher price

moves towards equilibrium

Why does Price Fall When There is a Surplus?

- Inventories will grow beyond the level they hold

Why does Price Rise When There is a Shortage?

- Quantity demanded is higher than quantity supplied
  - Buyers will bid up to get the selective goods.

Speed of Moving to Equilibrium:

- Some things equilibrate quickly (stock market)
- A house listed at $400,000 and not selling for 12 months shows that it is not at its equilibrium price. The price must drop and will be sold
- NOT ALL MARKET EQUILIBRIUMS WORK AT THE SAME SPEED

Moving to Equilibrium:

- Buyers and sellers trade money for goods as long as both benefit from the trade. ~~[illegible]~~
- Mutually beneficial trade drives the market to equilibrium.

Connection Between Equilibrium and Predictions

- Disequilibrium = Mental Construct = Something is going to happen
  - Equilibrium and disequilibrium are used to foreshadow what is about to happen.
    - Economists predict what will happen.

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Equilibrium in Terms of Consumers' and Producers' Surplus

Consumers' Surplus: The difference between the maximum price a buyer is willing ~~to~~ and able to pay for a good or service and the price actually paid.

- CS = Maximum buying price - Price paid
  - $10 for a movie but you pay ~~$7~~, your CS is $3

Producers (Sellers') Surplus: The difference between the price recieved by the producer or seller and the minimum selling price.

- PS = ~~[illegible]~~ Price recieved by producer - minimum selling price.
  - $5 for admission, someone pays $7, $2 producers' Surplus.

Total Surplus: Consumers' Surplus + Producers' Surplus

Equilibrium Special Property

- Both consumers' surplus and producers' surplus are maximized
  - Total surplus is maximized.

What Changes Equilibrium Price and Quantity?

- Equilibrium price and quantity are determined by Supply and demand
  - Whenever demand changes, or supply, or both, equilibrium price and quantity change.

Who Feeds Cleveland?

- "The Market"
  - People want snacks and food
  - People produce these snacks and food and do so, so that they can make money for them to buy themselves what they want
  - The people who produce the food send it to Cleveland where people sell these goods.
    - They sell these peoples goods so that they can have money to do what they want with
  - As the demand for a food item changes, the producers or sellers of food respond in a way that the buyers of food want them to respond. when they want more cookies, they get more cookies.
- Without a Market there is no reason to invent goods.
  - The Market is the invisible manifestation of the actions of millions of people ~~[illegible]~~ simply trying to make themselves better off.
    - The Market feeds cleveland

Spontaneous Order: The Spontaneous and unintended emergence of order out of the self-interested actions of individuals; an unintended consequence of human action directed at making themselves better off.