

1. What is Economics?
2. Historical aspects of Economics.
3. Difference between microeconomics and macroeconomics.
4. Production Possibilities Frontier.
5. Opportunity Cost.

1. What is Economics?

Unlimited Wants & Limited Resources.
Choice.

Economics the science of choice.

2. Historical aspects of economics:

1776 - Adam Smith, "Wealth of Nation".

1776 - 1929

1929 → The Great Depression

1936 → J.M. Keynes

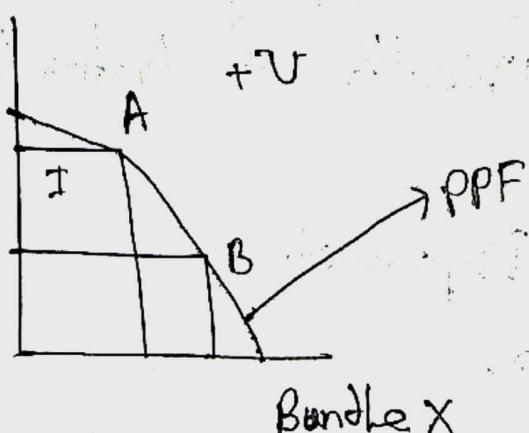
3. Difference between Microeconomics and Macroeconomics.

Microeconomics deals with the individual behaviour whereas macroeconomics deals with country.

4. Production Possibilities Frontier (PPF)

It shows the combination of goods and services those can be produced utilizing maximum amount of resources in a given period of time.

Bundle Y



Production at any point on the PPF is efficient because it utilizes maximum resources. Here, point A and point B are the example of efficient points.

Is it possible to produce at point U or any point beyond the PPF?

→ No because of lack of resources. Thus, point U is called unattainable point.

Any point under the PPF is inefficient point because some of the resources will be utilized.

5. Opportunity Cost.

Opportunity cost is the forgone benefit from the second best alternative

1. Bike

2. AC

3. Trip.

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Chapter 8 Demand, Supply, and Market equilibrium.

Outline

Demand

1. What is demand?
2. Law of demand
3. Demand function, demand schedule, and demand curve
4. Determinants of demand
5. Difference between change in quantity demand and change in demand.

Supply

6. What is supply?
7. Law of supply?
8. Supply function, supply schedule, and supply curve.
9. Determinants of supply.
10. Difference between change in quantity supply and change in supply.

Market equilibrium

21. What is market equilibrium?

22. Condition for market equilibrium

23. Finding equilibrium price and quantity.

24. Changes in equilibrium point.

1. What is demand?

Want	Need	Demand
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→ Want

→ Ability to buy

→ Willingness to buy.

2. Law of Demand

Remaining other things constant,

there is inverse relationship

between price and quantity. This

inverse relationship between price

and quantity demand is called

law of demand.

Lemma

Theory

Law.

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3. Demand function, demand schedule, and demand curve.

Demand function

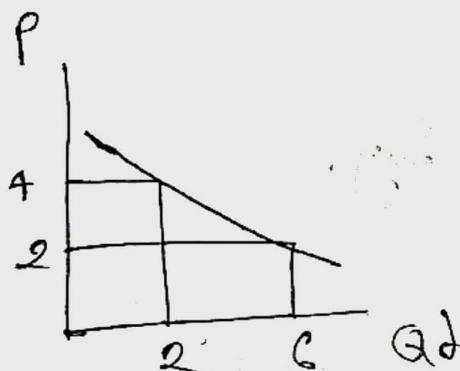
$$Q_d = f(p)$$

$$Q_d = 10 - 2p$$

Demand schedule

Price	Q_d
2	6
4	2

Demand curve



4. Determinants of demand

- Price
- Income
- Habit
- Taste
- Price of related goods.

Related goods:

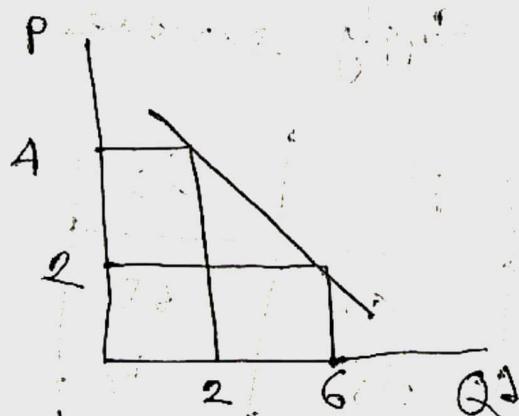
1. Complementary goods:
Oil and Car.

2. Substitute goods: Coke and Pepsi; Tea and Coffee.

5. Difference between change in quantity demand and change in demand.

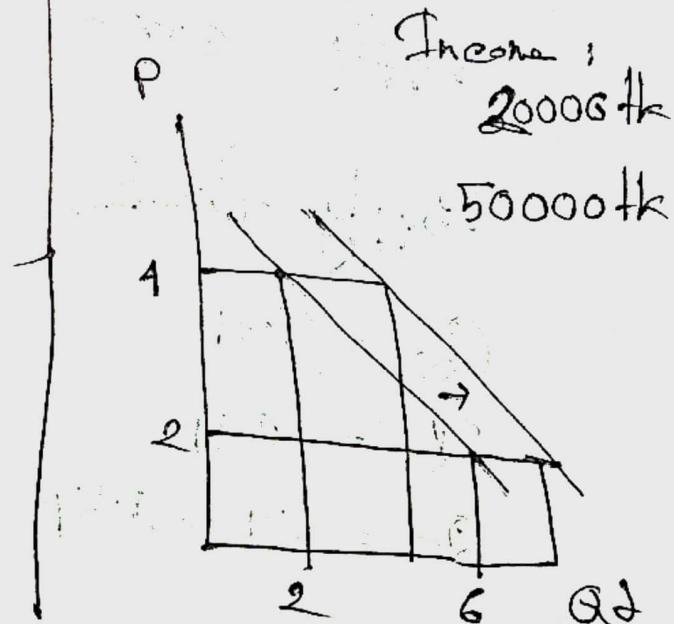
Change in quantity demand

If there is price change only, there will be a change in points on the demand curve, demand curve will not be shifted. This is called change in quantity demand.



Change in demand

If any other thing changes, the demand curve will be shifted, which is called change in demand.



6. What is supply?

Amount of goods and services those are available to sell in a given period time.

7. Law of supply

Remaining other things constant,

If price increases, quantity supply will be increased as well. This positive relationship between price and quantity supply is called law of supply.

8. Supply function, supply schedule and supply curve.

Supply function

$$Q_S = 0.5P$$

$$Q_S = 2 + P$$

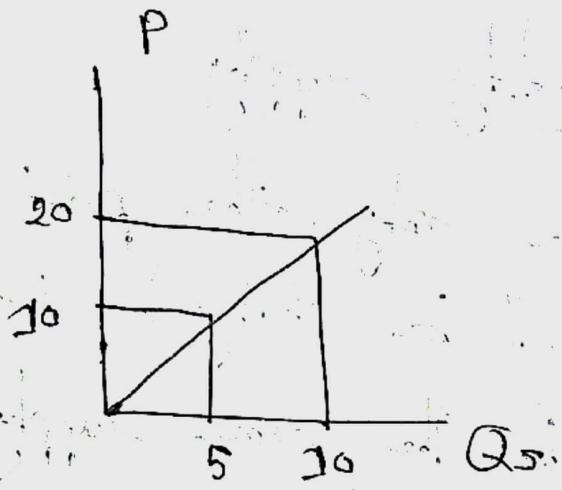
$$Q_S = -1 + 1.5P$$

Supply schedule

P	Q_S
10	8.5
20	10

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Supply curve in Economics



9. Determinants of supply

- Price

- Labor cost
- Cost of raw materials
- Technology
- Natural disaster

other things

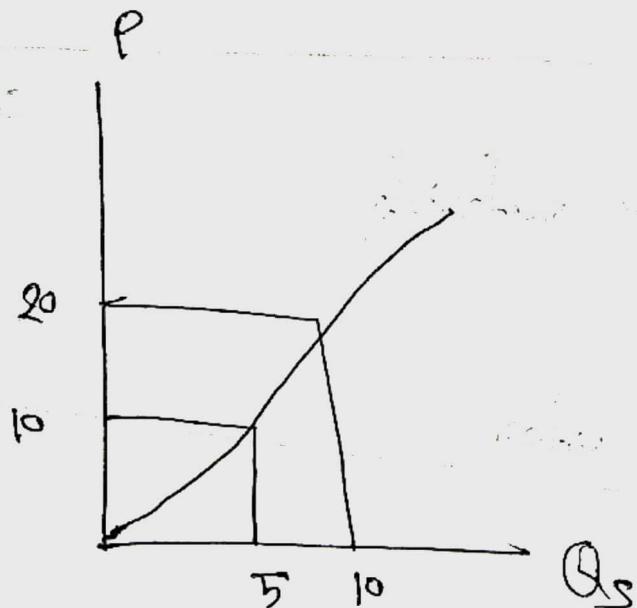
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10. Difference between change in quantity supply and change in supply.

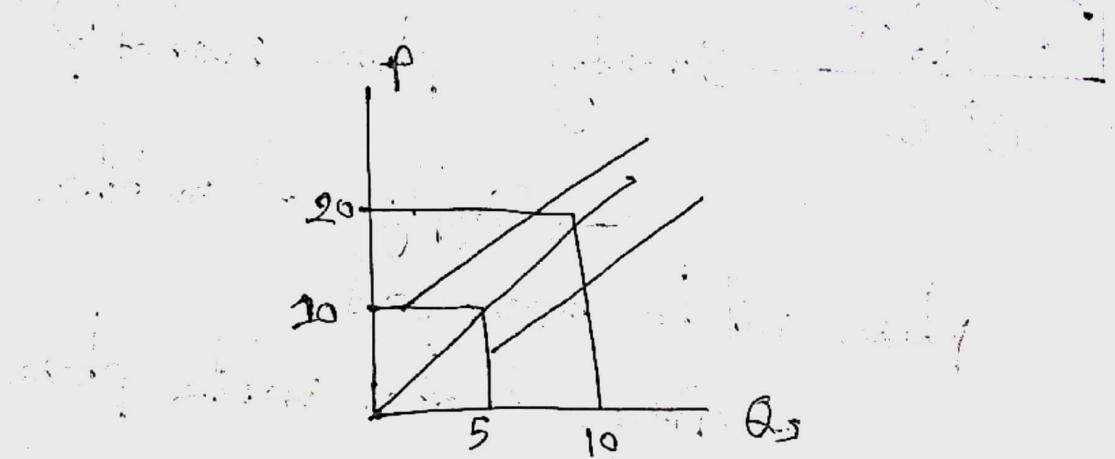
Change in quantity supply

Due to price change only, the point on the supply curve will be changed, but supply curve will be the same supply curve. This is called change in quantity supply.



Change in Supply

Except price, if any other determinant changes, the supply curve will be shifted, which is called change in supply.

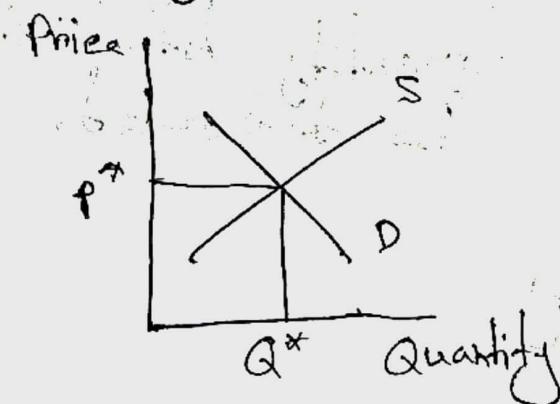


11. Market Equilibrium

Condition for market equilibrium

Quantity demand = Quantity supply

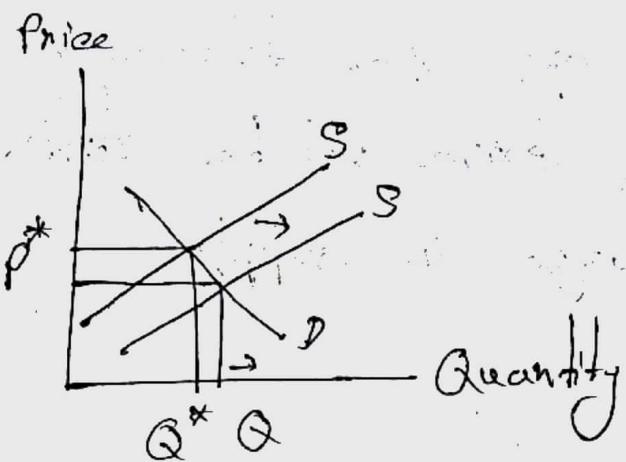
At the equilibrium point price and quantity are determined.



P^* — Equilibrium price

Q^* — Equilibrium
Quantity

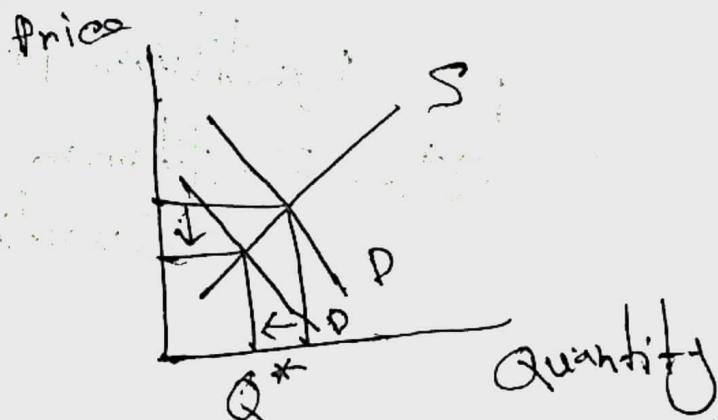
Changes in Market Equilibrium point



Example: Due to the technological advancement what will be the effect on mobile phone market?

- Supply of mobile phone will be increased.
- Price of the mobile phone will be decreased.
- Quantity of mobile phone will be increased.

\Rightarrow What will be the effect on coffee market if price of tea is decreased?



Coffee price and quantity both will be decreased.

Chapter: Elasticity

Outline:

1. Price elasticity of demand
2. Calculation of price elasticity of demand
3. Income elasticity of demand ④ Types of PED
4. Calculation of income elasticity of demand
5. Cross price elasticity of demand
6. Calculation of cross price elasticity of demand
7. Price elasticity of supply.
8. Calculation of price elasticity of supply.

1. Price elasticity of demand (PED)

It measures the responsiveness in Q_d due to price change. More specifically, how much percentage change will be in Q_d due to 1% change in price. For instance, if $PED = 2.0$, it means, for 1% change in price, quantity demand will be changed by 2.0%.

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$$PED = \frac{\text{Percentage change in } Q_d}{\text{Percentage change in } P}$$

$$= \frac{\frac{\Delta Q_d}{Q_d} \times 100}{\frac{\Delta P}{P} \times 100}$$

$$\text{CGPA} = 3.4$$

Current CGPA

$$PED = \frac{\Delta Q_d}{\Delta P} \times \frac{P}{Q_d}$$

$$= 3.8$$

Percentage change
in CGPA?

$$\frac{\text{Current - Previous}}{\text{Previous}} \times 100$$

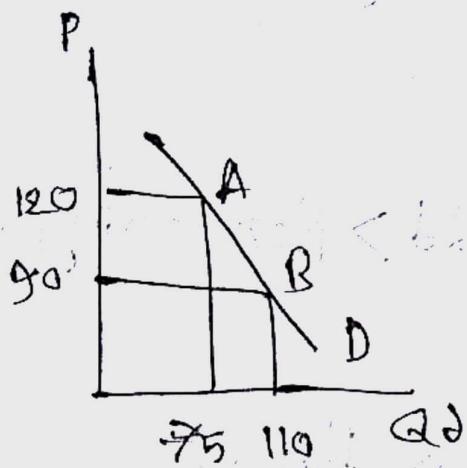
Δ In CGPA

$$\frac{\Delta \text{CGPA}}{\text{CGPA}} \times 100$$

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2. Calculation of PED



Calculate the PED from point

B to A \rightarrow Current

Previous

$$\begin{aligned} \text{PED} &= \frac{\Delta Q_d}{\Delta P} \times \frac{P}{Q_d} \\ &= \frac{110 - 75}{120 - 90} \times \frac{90}{110} \\ &= 0.75 \end{aligned}$$

If price increases by 12%, Qd will be decreased by 0.75%.

2. Types of price elasticity of demand.

- Elastic Demand

Percentage change in $Q_d >$ Percentage change in P.

$|PED| > 1$; Example: Car, House

- Inelastic demand

Percentage change in $Q_d <$ Percentage change in P.

$|PED| < 1$; Example: rice, vegetables

- Unit elastic demand

Percentage change in $Q_d =$ Percentage change in P.

$|PED| = 1$

- Perfectly elastic demand

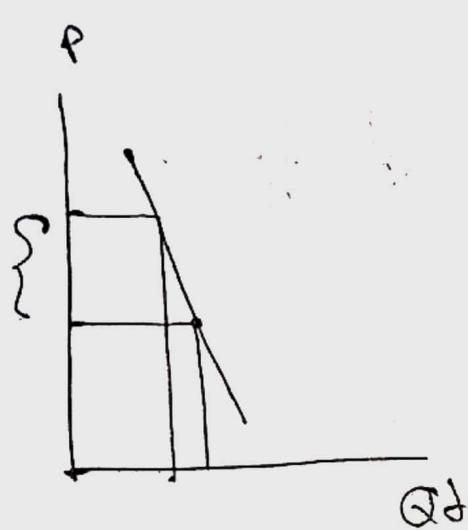
With no change in price, demand is infinite.

$|PED| = \text{Infinite}$. Example : Arms demand in the war.

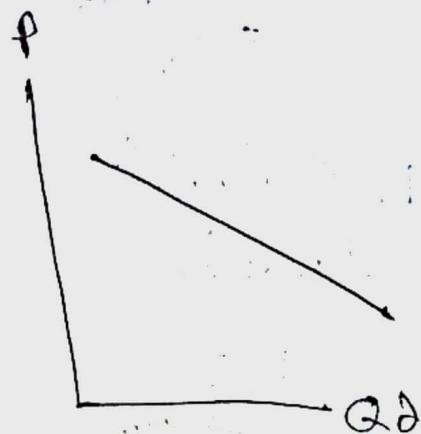
- Perfectly inelastic demand

Whatever the price change, there will be no change in demand.

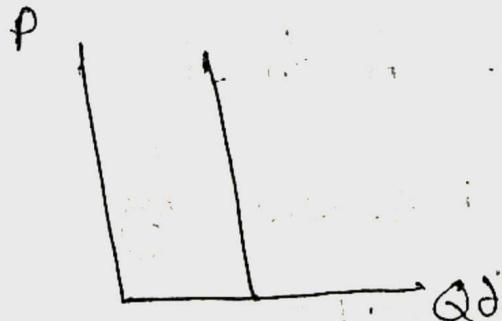
$|PED| = 0$; Example : Salt.



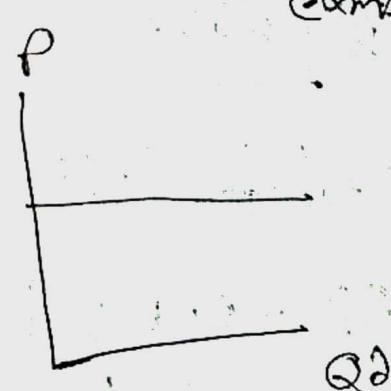
Inelastic Demand



Elastic demand



perfectly inelastic demand



perfectly elastic demand

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3. Income elasticity of demand (YED)

It measures the responsiveness in quantity demand due to income changes.

$$YED = \frac{\text{Percentage change in } Q_d}{\text{Percentage change in Income (Y)}}$$

$$= \frac{\Delta Q_d}{\Delta Y} \times \frac{Y}{Q_d}$$

4. Calculation of Income elasticity of demand.

	Income	Q_d
A	30000	2500
B	50000	6000

calculate YED from point A to B

$YED = 2.1$; If income increases by 2%, Q_d will be increased by 2.1%.

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5. Cross Price Elasticity of Demand (CPED)

$$CPED = \frac{\text{Percentage change in } Q_d \text{ of } X}{\text{Percentage change in price of } Y}$$

[Consider that X and Y are the related goods]

Point	Price of Tea	Q_d of Coffee
A	120	240
B	180	520

Calculate CPED from point B to A
and interpret the result.

6. Price elasticity of supply (PES)

It measures the changes in Q_s due to price change.

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Percentage change in Q_s

$$PES = \frac{\text{Percentage change in } Q_s}{\text{Percentage change in } P}$$

$$= \frac{\Delta Q_s}{\Delta P} \times \frac{P}{Q_s}$$

7. Calculation of price elasticity of supply.

point	price	Q_s
A	8	75
B	15	90
C	20	120

Calculate PES from point C to A.