

# **Economic Analysis for Business Decisions**

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# Managerial Economics

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Unit 1



# Economics

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## **Definition of Economics**

- Optimum Utilization of scare resources which are having alternative uses
- Optimum
- Scare resources

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- **Definitions**

- **Adam Smith**

Adam Smith, the father of modern economics, defined "economics as a subject, which is mainly concern with the study of nature and causes of generation of **wealth of nation**."

- **Alfred Marshall**

Alfred Marshall defined "economics as the study of mankind in the ordinary business of life." He explained that economics is not a natural science, such as Physics or Chemistry but it is a **Social science**.



# Economic Problem

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*“Problems of living are the economic problem”*

*(human wants are unlimited)*

*Resources to satisfy these wants are limited & also have alternative uses)*

# Nature of Economic

Science



Arts



# Scope of Economic

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- Economic Activity
- Economic Systems
- Economic Policies
- Econometrics
- Applied Economics

# Limitation of Economics

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- Study of Human Activities only
- Assumption based Principles
- Economic Laws are not Exact & Universal
- Economics is not non Controversial



# Branches of Economics

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- Micro Economics
- Macro Economics

## Points of Difference

## Microeconomics

## Macroeconomics

### Meaning :

Microeconomics is the study of individual economic behavior.

It's the study of economics at an individual, group or company level. e.g. Income of an individual

Macroeconomics is the study of entire economic systems. It is the study of a national economy as a whole e.g. National Income

### It deals with :

Individual product, firm, household, industry, wages, prices, etc.

Aggregates like national income, national output, price level, etc.

### Focus :

Individual unit

Economic aggregates

### Vision :

Microscopic

Telescopic

### View :

Worms eye view

Birds eye view

### Study :

Tree

Forest

### Scope :

Limited. It covers various issues like demand, supply, product pricing, factor pricing etc.

Broad. It covers various issues like, national income, general price level etc.

### Popularity :

Alfred Marshall

J. M. Keynes

### Significance :

Individual level

National level



# Managerial Economics

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## Meaning

Managerial economics is a branch of economics which deals with the application of economic theory to solve the business problems and decision making. It deals with the use of economic theories, tools, techniques and principles for business decision making.

## Definitions

- “Managerial Economics is economics applied in decision making. It is a special branch of economics bridging the gap between abstract theory and managerial practice.”
- “Managerial economics is an application of managerial theories, tools and techniques in critical business decisions”

# Nature of Managerial Economics

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- Managerial economics help in decision-making and planning.
- Managerial economics gives a road map for making decision regarding the particular output, pricing, capital, raw-materials etc.
- Managerial economics provide economic theory, concepts, tools and principles which can be used to solve the problems of business management.
- Thus, in brief it can be explained that Managerial Economics is both a science and art.



# Characteristics of Managerial Economics

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- It is Microeconomic in Nature
- It is Pragmatic
- It is Positive and Normative
- It Utilizes Some Theories of Macroeconomics
- It is Problem Solving in Nature

# Scope of Managerial Economics

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- Demand Analysis and Forecasting
- Cost Analysis
- Production Analysis
- Pricing Decisions
- Profit Management
- Capital Management



# Tools in Managerial Economics/Basic Principles

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- Economic theory offers a variety of tools and theories which assist managers and entrepreneurs in their decision making process and solving their business related problems. These tools and theories are helpful for them in solving their business related problems. These tools are taken as a guidelines in making decision.

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- Following are the basic economic tools for decision-making :
    - Opportunity cost
    - Incremental principle
    - Principle of the time perspective
    - Discounting principle
    - Equi-marginal principle



# Managerial Economics in Decision-Making

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- Decision making is an important part of today's business organizations. Making a decision is one of the most difficult tasks faced by entrepreneurs and managers.

Type of decisions required to take in Business

1. Price and Output Decision
2. Demand Estimation
3. Choice of Technique of Production
4. Advertising Decision
5. Long run Production Decisions
6. Investment Decisions

# *Concept of Firm*

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- A firm in economics, refers to a commercial or business institution aiming at the attainment of economic objectives. A firm is a commercial enterprise, a company that buys and sells products or services to consumers with the aim of making a profit.
- A firm may be of various types such as sole proprietorship firm, partnership firm, public limited companies, private limited companies. The public or government enterprise indicates all firms owned by society or government, strive to achieve their goal.



# Objectives of Firm

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- Profit Maximization
- Wealth Maximization

# *Profit Maximization*

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- Profit-making is one of the most traditional, basic and major objectives of a firm. Profit-making is the driving-force behind all business activities of a company.
- Profit-maximization implies earning highest possible amount of profits during a given period of time. A firm has to generate largest amount of profits by building optimum productive capacity both in the short run and long run depending upon various internal and external factors and forces



# *Wealth Maximization*

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- In modern managerial economics business decision making by managers are guided by the objective of maximizing value of the firm.
- It is a combination of two words viz. wealth and maximization. A wealth of a shareholder maximizes when the net worth of a company maximizes.
- Since in a corporate form of business it is the shareholders who are the owners of the firm, value of a firm represents shareholders wealth.
- Thus, value maximization of a firm implies maximization of shareholder's wealth. Therefore, this model is also known as “shareholders wealth maximization model”.



# Utility & Demand Analysis

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Unit 2



# Utility

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- **The power to satisfy one's want or desire is the utility of the commodity.**
- **Utility is usefulness but in Economics , it implies the capacity to satisfy the want of a good.**
- **E.g. Satisfaction after eating Domino's Pizza**

# Characteristics of Utility

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1. Utility is Psychological Term
2. Utility is not Necessarily same as Usefulness
3. Utility cannot be expressed in numerical terms
4. Utility Depends on the Intensity of Want
5. Utility is Different from Pleasure



# Law of Marginal Utility

- Marginal utility is the change in total utility from the addition of one extra unit of a good.

Quantity	Total Utility	Marginal Utility	
1	10	10	Initial utility
2	18	$18 - 10 = 8$	
3	24	$24 - 18 = 6$	Positive utility
4	28	$28 - 24 = 4$	
5	30	$30 - 28 = 2$	
6	30	$30 - 30 = 0$	Zero utility
7	28	$28 - 30 = -2$	Negative utility

# Law of Diminishing Marginal Utility

- The Law of Diminishing Marginal Utility states that the marginal utility of a good decreases as the quantity of the good consumed increases, or

Units	Total Utility	Marginal Utility
1 <sup>st</sup> glass of juice	20	20
2 <sup>nd</sup> glass of juice	31	11
3 <sup>rd</sup> glass of juice	40	9
4 <sup>th</sup> glass of juice	43	3
5 <sup>th</sup> glass of juice	43	0
6 <sup>th</sup> glass of juice	40	- 3



# Assumptions of the Law of Diminishing Marginal Utility

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- Rationality
- Consumption should be continuous
- Marginal utility of money
- Diminishing marginal utility
- Character of the consumer should remain same
- There should be no change in fashion
- There should be no change in the price of the product or service

# Indifference Curve

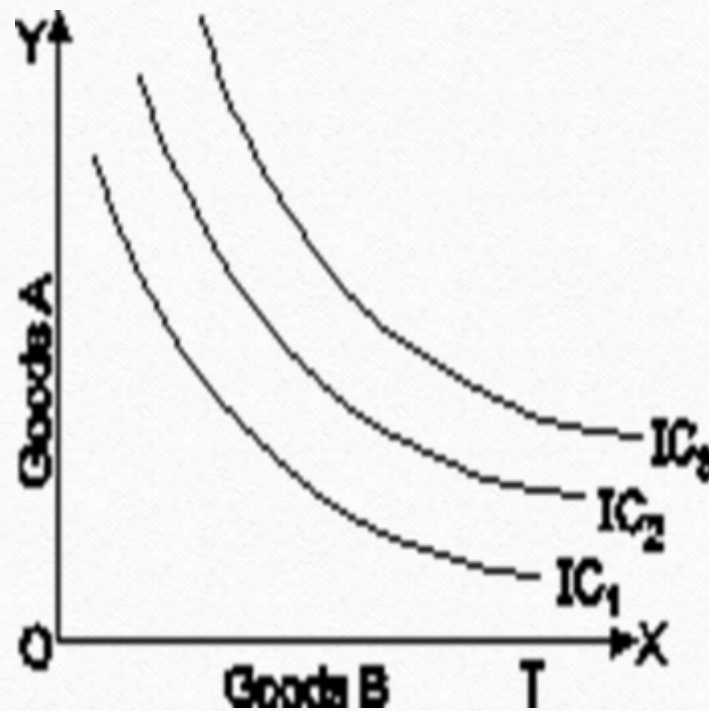
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- An indifference curve is a graphical representation which shows combination of two goods that give the consumer equal satisfaction and utility
- **Properties of Indifference Curve**
  1. The Indifference curve never intersects each other.
  2. They have downward sloping curve to the right.
  3. They are convex to the origin.
  4. The upper indifference curve gives the highest level of satisfaction



# Indifference Curve Map

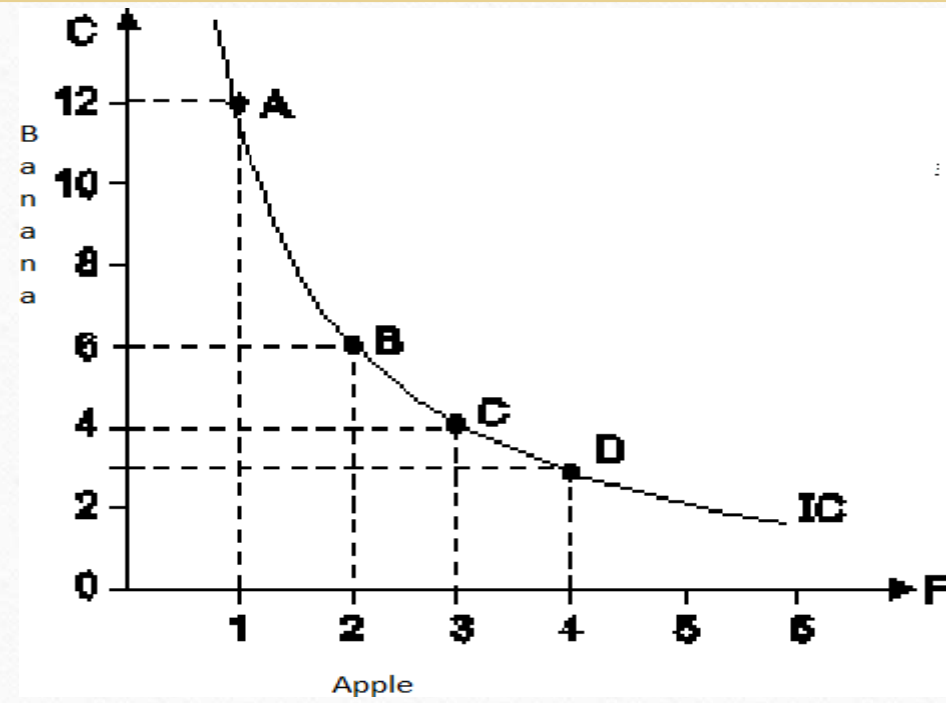
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Combination	Apples	Bananas
A	1	12
B	2	6
C	3	4
D	4	3





# Demand

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- Demand can be Defined as
    - “Willingness to purchase a certain quantity of goods/service at a particular price in a defined time backed by ability to purchase ”
1. Willingness to purchase
  2. Certain Quantity
  3. Price
  4. Ability to Purchase
  5. time period



# Law of Demand

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- It states that

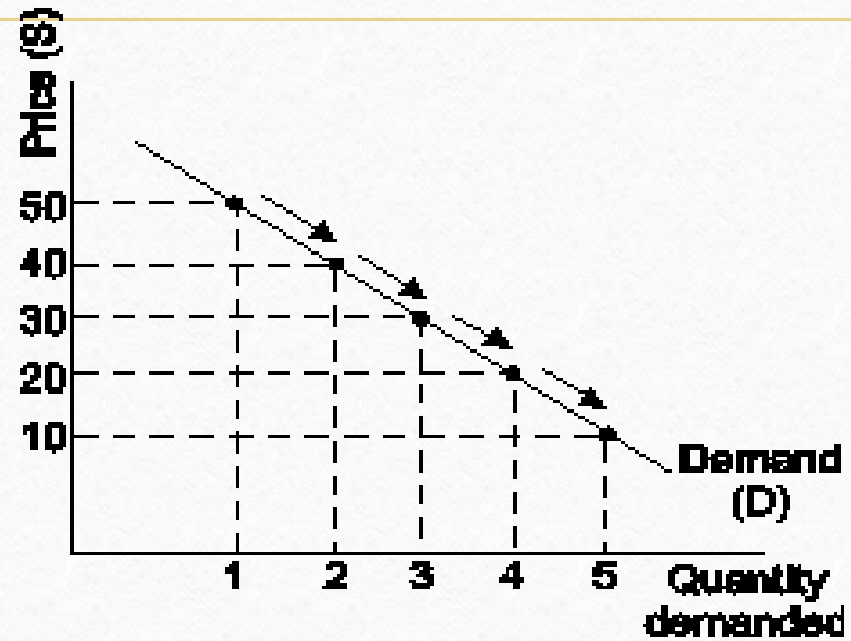
“when price of commodity increase the demand will decrease and when the price will decrease the demand will increase **if other things remain constant.**”

# Demand Schedule

Price of the commodity X per unit (Rs. )	Quantity demanded of commodity 'X' (kg)	Commodity
50	1	
40	2	
30	3	
20	4	
10	5	



# Demand curve



# Determinants of Demand

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1. Price of Product
2. Income of the consumer
3. Prices of related commodities
4. Tastes and preferences
5. Expectations
6. Climate and weather

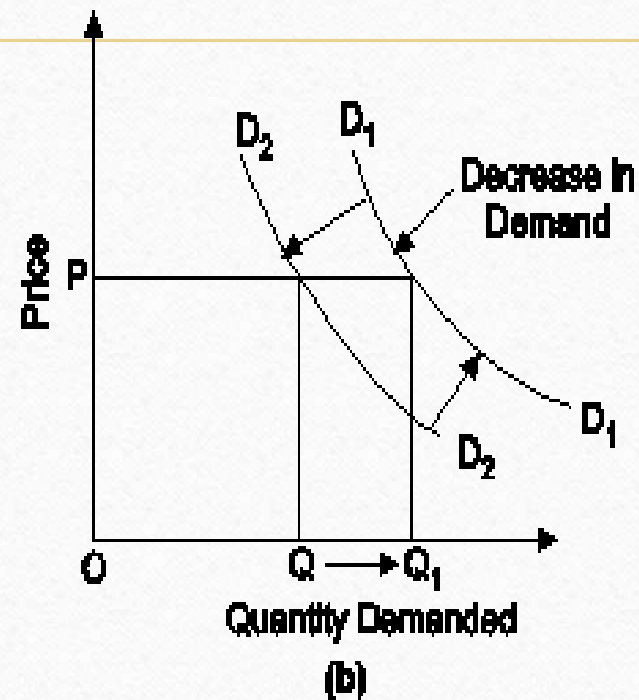
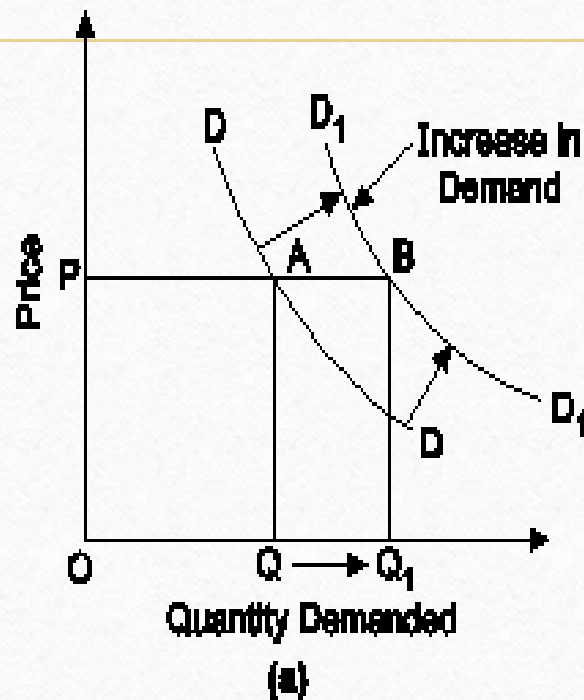


# Exceptions of Law of Demand

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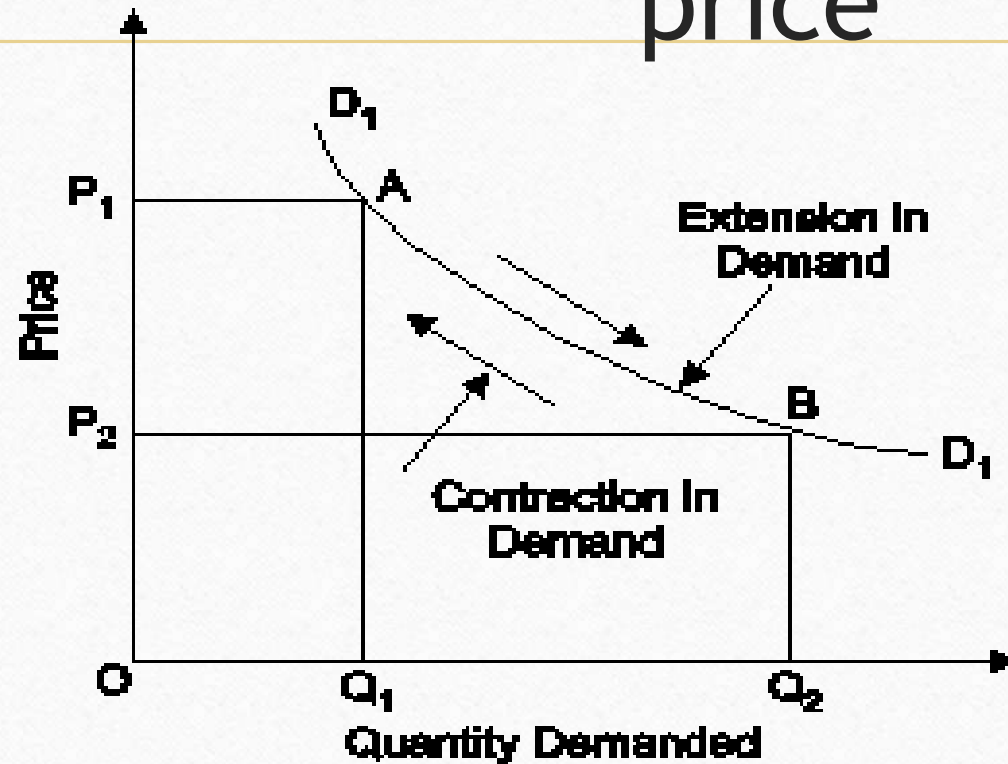
- **Giffen Goods**
- **Commodities used as status symbols**
- **Necessity Goods**
- **Outdated Goods**
- **Ignorance Effect**
- **Psychologically biased Customers**
- **Natural calamities**

# Increase and Decrease in Demand : shift in demand curve





# Expansion and Contraction in Demand when the demand is affecting only by price



# Elasticity of Demand

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- **Elasticity of demand represents the responsiveness of demand due to change in its determinants (price , income , cross (substitute/ complementary ))**



# Types of Elasticity Demand

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- The three main types of elasticity of demand are as follows :
  - (1) Price Elasticity of Demand ( $E_p$ )
  - (2) Income Elasticity of Demand ( $E_i$ )
  - (3) Cross Elasticity of Demand ( $E_c$ )

# There are 5 types of price elasticity of demand

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- **Perfectly Elastic Demand** ( $EP = \infty$ ) ...
- **Perfectly Inelastic Demand** ( $EP = 0$ ) ...
- **Relatively Elastic Demand** ( $EP > 1$ ) ...
- **Relatively Inelastic Demand** ( $EP < 1$ ) ...
- **Unitary Elastic Demand** ( $EP = 1$ ) ...



# **Income Elasticity of Demand**

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- **Income Elasticity of demand represents the responsiveness of demand due to change in Income**

# Cross Elasticity of Demand

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- **Cross Elasticity of demand represents the responsiveness of demand due to change in Price of Substitute /complementary**



# **Importance of Elasticity of Demand**

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- **Importance for Finance Minister**
- **Importance for the Monopolist**
- **Fixation of wages**
- **International Trade**
- **Terms of Trade**
- **Importance for the Businessman and Manufacturers**

# Demand Forecasting

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- Demand forecasting is an estimation of the future demand. Manufacturers or sellers try to find out the expected demand for their products or services in future, given the present state of demand determinants.
- **Importance of Demand Forecasting :**
  - ► Fulfilling objectives of the business.
  - ► Preparing the budget.
  - ► Taking the production decision.
  - ► Taking the pricing decision



# Methods of Demand Forecasting

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- 1. **Consumer Survey Method**
  - a) Complete Enumeration
  - b) sample survey method
- 2. **Expert Opinion Method**
  - a) Delphi Method
  - b) Sales force Method
- 3. **Market Experiments**
  - a) Test Marketing
  - b) Controlled Experiments
- 4. **Time Series Analysis**
  - a) Trend Analysis
  - b) seasonal variation
  - c) Random fluctuation
- 5. **Barometric Techniques**

# Supply and Market Equilibrium

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Unit 3



# Supply

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- Supply can refer to anything in demand that is sold in a competitive marketplace
- Supply is most used to refer to goods, services, or labor

# Meaning of Supply

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## Supply – definition

- Supply is the willingness and ability of producers to create goods and services to take them to market.
- Supply is positively related to price given that at higher prices there is an incentive to supply more as higher prices may generate increased revenue and profits.
- Describes the total amount of a specific good or service that is available to consumers.
- Relate to the amount available at a specific price or the amount available across a range of prices if displayed on a graph



# Law of Supply

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- The law of supply is the microeconomic law that states that, all other factors being equal, as the price of a good or service increases, the quantity of goods or services that suppliers offer will increase, and vice versa.

# Law of Supply is based on the following assumptions.

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- There is no change in the prices of factors of production
- There is no change in price of capital goods
- Natural resources and their availability remain the same
- Prices of substitutes are constant
- There is no change in technology
- Climate remains unchanged
- Political situations remain unchanged
- There is no change in tax policy



# Supply Curve

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- The supply curve is upward sloping because, over time, suppliers can choose how much of their goods to produce and later bring to market.
- At any given point in time, however, the supply that sellers bring to market is fixed, and sellers simply face a decision to either sell or withhold their stock from a sale; consumer demand sets the price, and sellers can only charge what the market will bear.

# Changes or Shifts in Supply

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- A supply curve shows how quantity supplied will change as the price rises and falls, assuming *ceteris paribus* so that no other economically relevant factors are changing.
- If other factors relevant to supply do change, then the entire supply curve will shift.
- Just as a shift in demand is represented by a change in the quantity demanded at every price, a shift in supply means a change in the quantity supplied at every price.



# Supply Function

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- The supply of a commodity depends on the factors such as price of commodity, price of labour, price of capital, the state of technology, number of firms, prices of related goods, and future price expectations and so on. Mathematically the supply function is
- $Q_s = f(P_x, P_r, P_f, T, O, E)$
- Where  $Q_s$  = Quantity supplied of x commodity
- $P_x$  = Price of x Commodity
- $P_r$  = Price of related goods
- $P_f$  = Price of factors of production
- $T$  = Technology
- $O$  = Objective of the producer
- $E$  = Expected Price of the commodity.

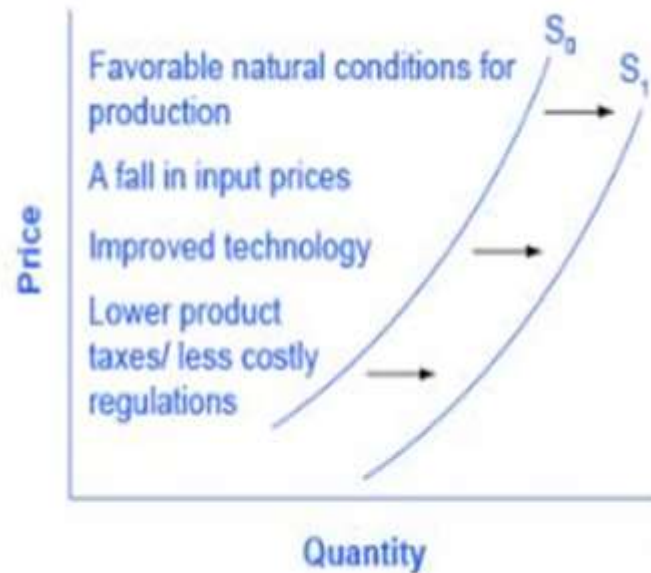
# Elasticity of Supply

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- **Perfectly Inelastic Supply**
- **Relatively Less-Elastic Supply**
- **Relatively Greater-Elastic Supply**
- **Unitary Elastic**
- **Perfectly Elastic supply**



# Factors affecting Supply



(a) Factors that increase supply



(b) Factors that decrease supply

# Factors determining Elasticity of Supply

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- Time
- Weather conditions
- Ease of access to specialist equipment
- Planning permission and other government restrictions
- Stocks
- Spare capacity



# Market Equilibrium

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- Supply and demand are equated in a free market through the price mechanism.
- If buyers wish to purchase more of a good than is available at the prevailing price, they will tend to bid the price up. If they wish to purchase less than is available at the prevailing price, suppliers will bid prices down.
- The price mechanism thus determines what quantities of goods are to be produced.
- The price mechanism also determines which goods are to be produced, how the goods are to be produced, and who will get the goods

# Changes in Market Equilibrium

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- *When there is a change in supply or demand, the old price will no longer be an equilibrium. Instead, there will be a shortage or surplus, and price will subsequently adjust until there is a new equilibrium.*



We can summarize the changes in equilibrium with the following table:

Change	Change in $P^*$	Change in $Q^*$
Supply increases $\uparrow$ (shifts right)	$P \downarrow$	$Q \uparrow$
Supply decreases $\downarrow$ (shifts left)	$P \uparrow$	$Q \downarrow$
Demand increases $\uparrow$ (shifts right)	$P \uparrow$	$Q \uparrow$
Demand decreases $\downarrow$ (shifts left)	$P \downarrow$	$Q \downarrow$
Demand Increases, Supply increases	$P \updownarrow$ (indeterminate)	$Q \uparrow$
Demand Increases, Supply decreases	$P \uparrow$	$Q \downarrow$ (indeterminate)
Demand decreases, Supply increases	$P \downarrow$	$Q \updownarrow$ (indeterminate)
Demand decreases, Supply decreases	$P \updownarrow$ (indeterminate)	$Q \downarrow$

# Production Analysis

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- Production is the result of cooperation of four factors of production (land, labour, capital and organisation).
- In Economics, production refers to the creation or addition of value. It simply transforms the inputs into output.
- The scale of production influence the cost of production. All manufacturers are aware that when production of a commodity takes place on a larger scale, the average cost of its production is low. This is the reason why the entrepreneurs are interested in enlarging the scale of production of their commodities. They stand to benefit from the resulting economies of scale. There is also the possibility of making their products available in the market at lower prices.



# Production function

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- Production function may be expressed as:  $Q = f(N, L, K, T)$
- Where,  $Q$  = Quantity of output,
- $N$  = Land;
- $L$  = Labour;
- $K$  = Capital;
- and  $T$  = Technology.
- Depending on the efficiency of the producer, this production function varies.
- The function implies that the level of output ( $Q$ ) depends on the quantities of different inputs ( $N, L, K, T$ ) available to the firm

# Long Run And Short Run Production Function

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- In Micro economics, the distinction between long run and short run is made on the basis of fixed inputs that inhibit the production.
- The short-run is the period where some inputs are variable, while others are fixed. Another feature is that firms do not enter into the industry and existing firms may not leave the industry.
- Long run, on the other hand, is the period featured by the entry of new firms to the industry and the exit of existing firms from the industry.
- In general, Production function may be classified into two
  - Short-run Production Function as illustrated by the Law of Variable Proportions.
  - Long-run Production Function as explained by the Laws of Returns to Scale



# Cost of Production

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- Cost of production refers to **the total cost incurred by a business to produce a specific quantity of a product or offer a service**. Production costs may include things such as labor, raw materials, or consumable supplies.
- Refer to all of the direct and indirect costs businesses face from manufacturing a product or providing a service.
- Can be determined by adding together the total direct materials and labor costs as well as the total manufacturing overhead costs.

# Cost Analysis

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The first step when calculating the cost involved in making a product is to determine the fixed costs.

The next step is to determine the variable costs incurred in the production process.

Then, add the fixed costs and variable costs, and divide the total cost by the number of items produced to get the average cost per unit.

$$\text{Average Cost Per Unit} = \frac{\text{Fixed Costs} + \text{Variable Costs}}{\text{Total No. of Items Produced}}$$



# Revenue Analysis & Pricing Policies

Unit 4

# Revenue

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- Revenue means the money which any firm receives after the sale of its products.
- **According to Dooley:**
- The revenue of a firm is its sale receipts or money receipts from the sale of a product



# Types of Revenue

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## 1. Total Revenue

Formula:

Total revenue = Price x Quantity of a commodity ( $TR = P \times Q$ )

- 2. Average Revenue

Formula:

Average revenue = Total revenue / Quantity of a commodity sold. ( $AR = TR/Q$ )

- 3. Marginal Revenue

Formula:

Marginal revenue = Rate of change/Quantity of a commodity sold ( $MR = \Delta TR/\Delta Q$ )

# Revenue Concept

Price of Goods	Quantity sold of Goods	Total Revenue ((1)x(2))	Average Revenue ((3)/(2))	Marginal Revenue
(1)	(2)	(3)	(4)	(5)
10	20	200	10	---
9	40	360	9	$360 - 200 = 160$
8	60	480	8	$480 - 360 = 120$
7	80	560	7	$560 - 480 = 80$
6	100	600	6	$600 - 560 = 40$
5	120	600	5	$600 - 600 = 0$
4	140	560	4	$600 - 560 = 40$



# Pricing Analysis

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- Price & Pricing
- Price – It is a amount which customer pays for product or services.
- Pricing – It is an analytical process to arrive at price of the product or service per unit in terms of quantity of money currency at a particular time.
- Importance of pricing: To Customer
  1. Affect purchasing power
  2. Price indicates product quality
  3. Customer's Value perception

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- Importance of pricing: To Firms

1. Determines profitability
2. Determines Market Share
3. Determines success

- Importance of pricing: To Economy

1. Influences factors of production
2. Determines Demand & Supply
3. Affects Savings & Investments



# Price output relationship under different market structure

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- **Market**

Generally , the term “market” refers to a particular place where goods are purchased and sold.

But, in economics, market is used in a wide perspective. In economics, the term “market” does not mean a particular place but the whole area where the buyers and sellers of a product are spread.

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- **Essential characteristics of market**

1. The existence of buyers and sellers
2. A commodity for which buyer and seller will deal.
3. A place, it may be a certain region, a country or the entire world.
4. Interaction of buyers and seller for purchase and sales



# Classification of market

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**1. On the basis of area :**

- (a) Local
- (b) National
- (c) International

**2. On the basis of time :**

- (a) Short period (b) Long period

**3. On the basis of competition :**

- (a) Perfect competitive market
- (b) Imperfect competitive market
  - I. Monopolistic market
  - II. Perfect Oligopoly
  - III. Imperfect Oligopoly

# Market Structure

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- Market structure refers to the nature and degree of competition in the market for goods and services. The structures of market both for goods market and service (factor) market are determined by the nature of competition prevailing in a particular market.
- Market structure is generally classified on the basis of competition



# Price Determination Under Perfect Competition

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- **Perfect Competition**
- Perfect competition is a kind of market structure where large number of buyers and sellers interact with each other for purchase or sale of homogeneous good or services

# Characteristics of perfect competition

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- Large number of buyer and seller :
- ▶ Homogeneous product :
- ▶ Perfect mobility of factors of production
- ▶ Free entry and free exit
- ▶ Perfect knowledge
- ▶ No government interference .
- ▶ Absence of collusion
- ▶ Absence of Selling Costs



## **Price Determination under Perfect Competition in short run or firms equilibrium under perfect market in short run**

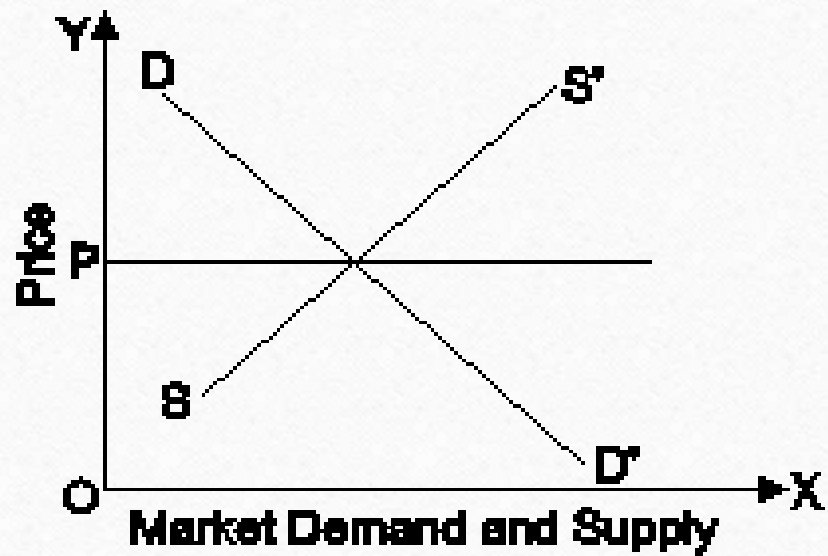
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Under perfect completion in short run price determination can be understand in two segment

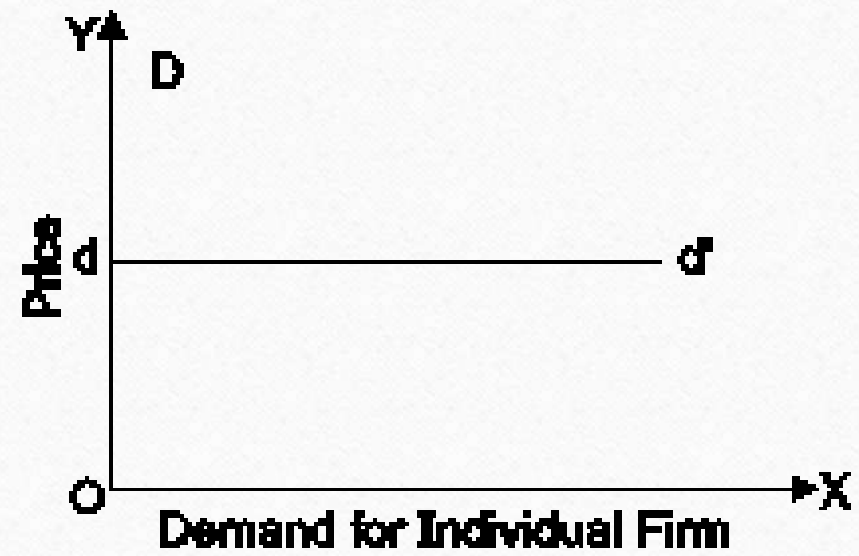
- ► 1. Price determination in industry.
- ► 2. Price determination in firm.

## Determination of Market Price and Demand for Individual Firms

### Price determination in firm



(a)



(b)



# Monopolistic Competition

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- A market situation where there is only one seller and barriers for others to entry, product having no close substitute, cross elasticity of demand being low with every other product and no other firm produces an identical product, is called monopoly.

# Features

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- **Single Sellers**
- ▶ **Homogeneous Product**
- ▶ **Restricted Entry**
- ▶ **Independent Behaviour**
- ▶ **Full control Over Price**
- ▶ **Price Discrimination**
- ▶ **Increased Scope for Mergers**
- ▶ **Price Elasticity**
- ▶ **Lack of Innovation**
- ▶ **Lack of Competition**



# Oligopoly

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- Oligopoly is market where a few large firms compete against each other and there is an element of interdependence in the decision-making of these firms. Each firm in the oligopoly recognizes this interdependence. Any decision one firm makes (be it on price, product or promotion) will affect the trade of the competitors and so results in countermoves
- **Characteristics of Oligopoly Market**
  - ► 1. Interdependence
  - ► 2. Importance of Advertising and Selling Costs
  - ► 3. Group Behaviour
  - ► 4. Identical or Differentiated Products
  - ► 5. Few Sellers
  - ► 6. Small Number of Large Firms

# Price determination under Oligopoly

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- This is one of the prevailing models for price determination under Oligopoly.
- Assumptions :
  - There are following assumptions in kinked demand curve :
    1. There are few firms in the oligopolistic industry.
    2. The product produced by one firm is a close substitute for the other firms.
    3. The product is of the same quality. There is no product differentiation.
    4. There are no advertising expenditures.
    5. There is an established or prevailing market price for the product at which all the
  - sellers are satisfied.
  - 6. Each seller's attitude depends on the attitude of his rivals.
  - 7. Any attempt on the part of a seller to push up his sales by reducing the price of his product will be counteracted by the other sellers who will follow his move, if he raises the price, others will not follow him. Rather they will stick to the prevailing price and cater to the customers, leaving the price raising seller.



# Pricing under Collusion (Collusive Oligopoly)

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- When competing firms make some kind of agreement about pricing and output they are said to collude. The agreements may be formal or tacit. But formal or open agreements are illegal in most countries. The agreement between oligopolists is generally tacit or secret.
- When firms enter into collusive agreement, collusive oligopoly comes into existence.
- Collusion can be of two types :
  - (A) Perfect/ Cartels collusions.
  - (B) Imperfect/ Price leadership collusion.

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- **Conditions for a Successful Collusion :**

- Agreements to raise prices are not equally possible in all industries. The collusion can be successful only if the following

- conditions exist :

1. Small Number of Firms.
2. Threat of Entry Potential Rivals.
3. Stable Demand Conditions.
4. Less Fear of Anti-Trust Action.



# Imperfect Collusion (Price Leadership)

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- In an oligopolistic situation, there are more than two or a few sellers who are able to exercise monopolistic influence. In such a market situation, we generally find that there exists what is called the 'price leadership'. Under price leadership, one firm assumes the role of a price leader and fixes the price of the product for the entire industry. The other firms in the industry simply follow the price leader and accept the price fixed by him and adjust their output to this price. The price leader is generally a very large or a dominant firm or a firm with the lowest cost of production.

# Duopoly

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- A duopoly is a type of oligopoly where two firms have dominant or exclusive control over a market. The key components of a duopoly are:
  - a) How the firms interact with one another.
  - b) How they affect one another.

## **Characteristics of Duopoly:**

1. Existence of only two sellers.
2. Independence
3. Presence of monopoly elements: so long as products are differentiated, the firms enjoy some monopoly power, as each product will have some royal customers.



# Consumption & Investment Function & Business Cycle

Unit 5

# Consumption Function

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- Consumption function was given by the famous economist John Maynard Keynes. It is a mathematical formula. Consumption function established the relation between the real disposable income and consumer spending. This variable is regarded as the essential component of short-term demand in an economy by Keynes.

- Formula:

$$C = a + c Y_d$$

- There are three essential items on which Keynes consumption function is based and shows the level of consumer spending:



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- 1.  $Y_d$  – disposable income
  - 2.  $a$  – autonomous consumption ( consumption where income is 0. e.g. even with no income, you may borrow to be able to buy food)
  - 3.  $c$  – Marginal propensity to consume (the % of extra income that is spent). Also known as induced consumption.

# Determinants of Consumption Function

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- 1. Money Income of the Community
- 2. Distribution of Income in the Community
- 3. Changes in the Price Level
- 4. Changes in the Wage Level
- 5. Change in Consumers, Tastes & Fashions



# Nature of Consumption Function/ Propensity to consume

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- A schedule showing Various amounts of consumption which correspond to different levels of income is known as propensity to consume. It is the ratio between C & Y.

## 1. Average Propensity to Consume

$$APC = C/Y$$

E.g. if Income is 100 & consumption is 90 then  $APC = 0.9$

## 2. Marginal Propensity to Consume (MPC)

$MPC = \text{change in consumption} / \text{change in income}$

E.g. If income rises 200 Rs. To 240 Rs. And consumptions rises from Rs. 160 rs to 180 Rs.  
Then  $20/40 = 0.5$

# Investment Function

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- Investment means providing the fund for present duration of the time period, the benefit of which will be obtained in the future period of time by generating funds.



# Types of Investment

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1. Real Investment & Financial Investment
2. Gross Investment & Net Investment
3. Private Investment & Public Investment
4. Ex-Ante Investment & Ex-Post Investment
5. Induced Investment & Autonomous Investment

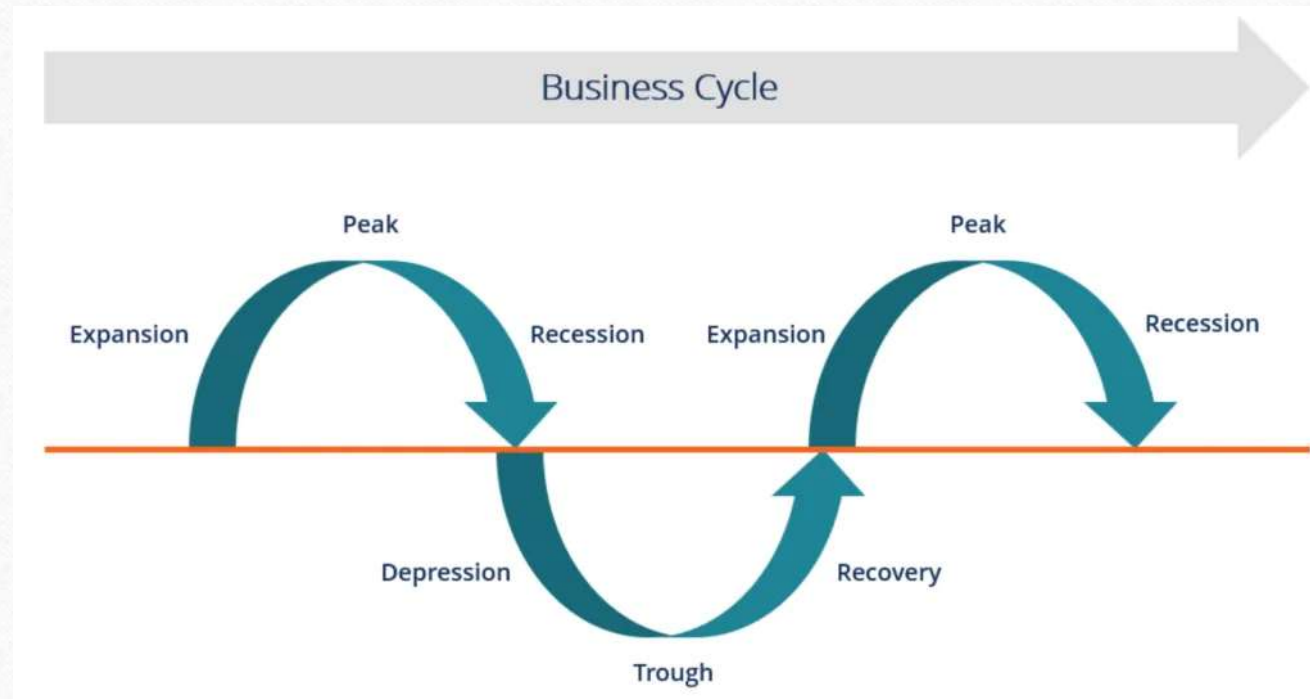
# Business Cycle

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- The business cycle, also known as the economic cycle, refers to the recurring pattern of expansion and contraction in the economy over time. This cycle is characterized by periods of economic growth (expansion), followed by periods of economic decline (contraction), and eventually a return to growth (recovery).



# Business Cycle



# The four stages of the business cycle are

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- 1. Expansion: This is the period of economic growth, characterized by increasing output, rising employment, and low inflation. This stage typically lasts for several years.
- 2. Peak: This is the point at which economic growth slows down, and the economy reaches its highest point. This stage is often marked by signs of overheating, such as rising inflation and interest rates.
- 3. Contraction: This is the period of economic decline, characterized by decreasing output, rising unemployment, and deflation. This stage typically lasts for several months or years.
- 4. Trough: This is the point at which the economy reaches its lowest point, marking the end of the contraction phase and the beginning of the recovery phase.
- The length and severity of each stage can vary widely, depending on a variety of factors such as government policy, technological innovation, and external shocks such as natural disasters or global economic events. Understanding the business cycle is important for businesses, policymakers, and investors as it helps them to anticipate and prepare for economic fluctuations.



# Features of Business Cycle

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- 1. Recurring Fluctuations
- 2. Periods is no longer than a year
- 3. Phenomenon of the crisis

# Cause of Business Cycle

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- 1. Banking Operations
- 2. Capital Goods & Consumer Goods
- 3. Purchasing Power
- 4. Profit
- 5. Human psychology
- 6. Cyclical Changes in weather



# Impact of Business Cycle

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- 1.Effect during Expansion
- 2.Effect During Recession

# Business Decisions

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- Decision making is a process and a decision is the product of such a process.
- Business decisions refer to the choices and actions taken by individuals or organizations in response to various business situations. These decisions can have a significant impact on the success or failure of a business, and they are typically based on a combination of factors such as market conditions, financial analysis, strategic planning, and risk assessment.



# Features of Business Decisions

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- 1. Scientific Decisions
- 2. Strategic Decisions
- 3. Tactical Decisions
- 4. Decisions Under Certainty
- 5. Decisions Under Risks
- 6. Decisions Under Uncertainty

# Types of Business Decisions

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- 1. What to Produce
- 2. How to Produce
- 3. For Whom to Produce