

Cover Page

PAPER 4 : BUSINESS ECONOMICS

Saransh Last Mile Referencer

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Preface

The Board of Studies is dedicated to delivering outstanding services to its students, tirelessly striving for the highest standards of education and support. It imparts quality academic education through its value-added study materials, that explain concepts clearly and in simple language. Illustrations and Test Your Knowledge Questions contained therein facilitate enhanced understanding and application of concepts learnt. Mock Test Papers empower students to gauge their readiness ahead of each examination, ensuring confidence and clarity. Additionally, BoS offers engaging live virtual classes led by distinguished faculty, reaching students far and wide across the nation.

To effectively engage with its students, the Board of Studies has been publishing subject-specific capsules in its monthly Students' Journal, "The Chartered Accountant Student," since 2017. These capsules are aimed at facilitating efficient revision of concepts covered across various topics at the Foundation, Intermediate, and Final levels of the Chartered Accountancy Course. This initiative underscores the BoS commitment to enhancing learning and comprehension among its students through accessible and attractive educational materials. Each issue of the journal includes a capsule relating to specific topic(s) in one subject at each of the three levels. In these capsules, the concepts and provisions are presented in attractive colours in the form of tables, diagrams and flow charts for facilitating easy retention and quick revision of topics.

The Board of Studies (BoS) is now introducing a comprehensive booklet titled 'Saransh - Last Mile Referencer for Foundation Paper 4 - Business Economics'. This booklet aims to consolidate significant concepts across various topics in Business Economics, particularly those included in the syllabi at the Foundation level of CA Course. It features diagrams, flow charts, tables, and illustrated journal entries, providing a one-stop repository for key accounting topics.

However, the readers are advised to refer the study material for comprehensive study and revision. Under no circumstances, this booklet substitutes the detailed study of the material provided by the Board of Studies.

By capturing essential points in a concise format, 'Saransh' will facilitate better understanding and retention of basic Concept of Business Economics, enhancing the learning experience for students preparing for their examinations and beyond. It will indeed serve as a valuable ready reckoner for readers, enabling them to grasp the essence of the subject comprehensively.

Happy Reading!

President Message



It is with immense pride that I introduce the Saransh booklets, a meticulously curated resource available across the Foundation and Intermediate levels of the Chartered Accountancy course. ICAI has always been dedicated to providing our students with the best possible resources to succeed in their studies and careers, and Saransh is a demonstration of this commitment.

The Saransh — Last Mile Referencers have been thoughtfully designed by the Board of Studies (BoS) to serve as an invaluable companion for your studies and exam preparation. Our aim is to simplify complex concepts and provisions, making them easier to understand, memorize, and revise. However, Saransh is not a substitute for the detailed BoS study material but a supplementary tool to complement your in-depth study.

The newly revamped Saransh booklets have been updated not only in content but also in their presentation. With a more logical and organized structure, enhanced visual appeal, and a user-friendly layout, these booklets are now more effective in aiding your studies.

We have extended the Saransh series to cover all core areas of the Chartered Accountancy course. Saransh is designed not only to help you grasp and recall essential concepts but also to guide you in approaching each subject strategically. The insights provided in these booklets will help you develop a structured approach to your studies, ensuring that you are well-prepared for your examinations.

I urge you to make the most of the Saransh booklets. While these booklets will support you, it is your dedication, perseverance, and hard work that will ultimately determine your success.

I wish each of you the very best in your studies and future careers.

Warm regards,

A handwritten signature in black ink, appearing to read 'Ranjeet Agarwal', written in a cursive style.

CA. Ranjeet Kumar Agarwal
President, ICAI

Vice President Message



The Chartered Accountancy curriculum is known for its rigorous standards and comprehensive scope and coverage. Understanding and mastering the complexities of various subjects requires not only dedication but also effective learning tools. Utilizing well-designed learning tools can significantly enhance your understanding and retention.

As we advance in our journey of nurturing the next generation of Chartered Accountants, it is with great pleasure that I introduce the revised and updated Saransh — Last Mile Referencers. These booklets, intended to be your academic companions, have been meticulously developed by the Board of Studies (BoS) of ICAI and are designed to enhance your academic experience across the Foundation and Intermediate levels of the Chartered Accountancy course. They will serve as a vital resource, condensing complex topics into easily digestible formats.

However, I must emphasize that Saransh is not intended to replace the detailed study material provided by the Board of Studies (BoS). Instead, Saransh is designed to complement the study material, offering a streamlined overview for revision and quick reference as you prepare for your exams.

The BoS has revamped both the content and presentation, ensuring that these booklets are more user-friendly and visually appealing. These enhancements are aimed at helping you not just memorize information, but also better understand and apply the concepts that are crucial to your success as a Chartered Accountant.

A major benefit of the Saransh booklets is their strategic approach to studying each subject. By providing a clear and concise summary of each topic, these booklets help you organize your revision more efficiently, allowing you to concentrate on the most critical areas in preparation for your exams. Strategic learning is crucial in the Chartered Accountancy course, and Saransh equips you with the tools needed to master this approach effectively.

I am confident that the Saransh booklets will play a crucial role in your journey towards becoming a Chartered Accountant.

I wish you all the best in your studies and future endeavours.

Warm regards,

A handwritten signature in black ink, appearing to read 'Charanjot Singh Nanda'.

CA. Charanjot Singh Nanda
Vice President, ICAI

Chairman's Message



It gives me great pleasure to unveil the updated Saransh — Last Mile Referencer series, a crucial resource for aspiring Chartered Accountants. This year, we have extended our efforts to cover all papers across Foundation and Intermediate levels, enhancing the booklets with new sections. The Board of Studies (BoS) remains committed to offering quality academic materials, presenting key concepts in visually appealing formats such as tables, diagrams, and flowcharts. These improvements aim to aid students in mastering critical topics and serve as a quick reference for effective exam preparation and professional growth.

It is essential to understand that Saransh is not a substitute for the detailed study of the material provided by the Board of Studies. Students need to develop an in-depth understanding of the concepts and provisions involved in the subject and then refer to the encapsulated form of the same as given in Saransh. This approach ensures that students build a solid foundation before relying on the summarized content for revision.

The presentation of the Saransh booklets has been revamped to provide students with an enriched learning experience through enhanced visual appeal and an aesthetic user-friendly layout. The booklets now feature a more logical and organized structure, with a special emphasis on facilitating easy memorization and retention of the concepts and provisions with the aid of visual imagery, tables, diagrams, and flowcharts.

Saransh booklets provide an insightful overview of each subject and offer strategic guidance on how to approach each subject strategically. To effectively understand and master complex topics, students are encouraged to familiarize themselves with strategic learning techniques. Begin by reading the relevant content from your Study Material. Then, write an explanation of the topic in your own words, using simple language and examples, as if you are teaching someone unfamiliar with the subject. Identify areas where your understanding is lacking and revisit those portions in the Study Material, focusing on examples, illustrations, and diagrams provided. This iterative process will strengthen your understanding of complex topics.

Additionally, employ effective memorization techniques. At the end of each study day, review the concepts and provisions you covered during the day. The next day, before starting new topics, revisit what you studied previously. This continuous revision will enhance your retention. Utilize mnemonics such as acronyms, acrostics, and visual imagery based on your interests to further reinforce your memory of the concepts and provisions.

The Saransh booklets serve as a powerful tool for students to bridge the gap between understanding and application. By presenting information in a visually appealing and concise manner, these booklets help students quickly grasp and recall essential concepts. The revamped layout and strategic presentation ensure that students can efficiently navigate through complex topics and prepare effectively for their examinations.

Chairman's Message

Furthermore, the Board of Studies remains dedicated to continuously updating and improving the Saransh booklets to reflect the latest developments in the field of accountancy. By staying abreast of changes in the industry standards, we aim to provide students with the most relevant and up-to-date information.

To further support students in their preparation, the Board of Studies has also developed supplementary materials and resources that complement the Saransh booklets. These include revision test papers and mock test papers that provide students with additional opportunities to test their knowledge and practice applying the concepts they have learned. By offering a comprehensive suite of study aids, we aim to cater to the diverse learning needs of students and help them achieve their academic goals.

Moreover, the Board of Studies recognizes the importance of continuous feedback and improvement. We encourage students to provide their feedback on the Saransh booklets and other study materials, as it helps us identify areas for improvement and make necessary updates.

As we move forward, the Board of Studies will continue to innovate and enhance the Saransh series and other academic resources. Our goal is to equip students with the knowledge, skills and confidence they need to excel in their examinations and professional careers.

The updated Saransh — Last Mile Referencer series represents a significant step forward in our efforts to support and guide aspiring Chartered Accountants. We encourage all students to make full use of Saransh and integrate it into their study routines to achieve their goals and excel in their examinations.

I would like to extend my heartfelt thanks to the members of the Board of Studies and all those who have contributed to the development and enhancement of the Saransh booklets.



CA. (Dr.) Rajkumar S Adukia
Chairman, Board of Studies

Vice Chairman's Message



I am delighted to present the newly updated Saransh – Last Mile Referencer series, a flagship initiative of Board of Studies, designed to facilitate the students in their journey of becoming future ready Chartered Accountants. This initiative exemplifies the ICAI's unwavering commitment to deliver excellence in education and foster a culture of continuous learning.

The Saransh booklets have been meticulously developed for all the papers at the Foundation and Intermediate levels to serve as an invaluable resource for the students, simplifying complex topics into concise, visually engaging and easy-to-retain format. Through flowcharts, tables and diagrams, these booklets are designed to help students understand, retain and strategically apply the key concepts/provisions.

I would like to highlight that Saransh is an invaluable tool for revision and quick reference. Students should first immerse themselves in the comprehensive study of each subject to establish a strong fundamental understanding of the concepts/provisions. Saransh should then be utilized as a complementary resource to augment their preparation and reinforce their learning for greater retention and success.

The content of the Saransh booklets is systematically arranged for easy comprehension. With their logical structure and aesthetic design, they make learning both effective and enjoyable. They are designed to help the students navigate the success path in the Chartered Accountancy course with confidence and clarity.

I encourage our students to make the best use of the Saransh booklets alongwith the other BoS publications. They are advised to approach their studies with a focussed, disciplined and progressive mindset.

My dear students, I wish you all the very best in your studies and the exciting career that lies ahead!

Warm regards,

CA. Sridhar Muppala
Vice Chairman, Board of Studies

Before We **Begin**

The term 'Economics' owes its origin to the Greek word 'Oikonomia' which means 'household'. Till 19th century, Economics was known as 'Political Economy.' The book named 'An Inquiry into the Nature and Causes of the Wealth of Nations' (1776) usually abbreviated as 'The Wealth of Nations', by Adam Smith is considered as the first modern work of Economics.

Economics is the study of the processes by which the relatively scarce resources are allocated to satisfy the competing unlimited wants of human beings in a society. Of course, the available resources will be efficiently used when they are allocated to their highest valued uses.

The origin of economics as a formal discipline can be traced back to ancient civilizations, where rudimentary forms of economic activity existed. However, the systematic study of economics as we know it today began to emerge much later in history.

Ancient Roots: Economic activities have been a part of human civilization since its early stages. Ancient civilizations such as Mesopotamia, Egypt, Greece, Rome, India, and China engaged in trade, agriculture, and commerce. Early philosophers like Plato, Aristotle, and Xenophon discussed economic concepts in their works, laying the groundwork for later economic thought.

Mercantilism: In the late Middle Ages and the early modern period, particularly during the 16th to 18th centuries, mercantilist economists emerged in Europe. Mercantilism focused on increasing a nation's wealth through trade, emphasizing policies such as hoarding precious metals and establishing colonies to secure raw materials.

Classical Economics: The late 18th and early 19th centuries saw the rise of classical economists such as Adam Smith, David Ricardo, and John Stuart Mill. Adam Smith's seminal work, "The Wealth of Nations" (1776), is often regarded as the foundation of modern economics. Classical economists focused on principles of free markets, specialization, and the division of labour.

Keynesian Economics: The Great Depression of the 1930s prompted a re-evaluation of economic theories. John Maynard Keynes emerged as a prominent figure with his book "The General Theory of Employment, Interest, and Money" (1936). Keynesian economics advocated for government intervention in the economy to manage aggregate demand and stabilize economic fluctuations.

Modern Economics: The latter half of the 20th century saw the development of various schools of economic thought, including monetarism, supply-side economics, and more recently, behavioural economics and complexity economics. Economists like Milton Friedman, Friedrich Hayek, and Amartya Sen have contributed significantly to modern economic theory.

Business Economics which has been introduced at the Foundation level of the Revised CA course, has been developed keeping in mind the fact that CAs now a days have to take up the role of not merely an accountant or auditor but a business Solution provider. The paper is of 100 marks and the syllabus of the earlier paper has been increased commensurate with the marks in the Examination. Business Economics which integrates economic theory with business practice will help them in the process of business decision making. There are ten chapters in Business

Before We **Begin**

Economics namely, Introduction to Business Economics, Theory of Demand and Supply, Theory of Production and Cost, Price Determination in Different Markets, Business Cycles, Determination of National Income, Public Finance, The Money Market, International Trade, and Indian Economy.

Relevance to Accounting and Finance Professionals: The syllabus is tailored to the needs of accounting and finance professionals, as it includes topics such as national income accounting, money and banking, and international trade, which are directly relevant to financial decision-making and analysis. This ensures that students are equipped with the necessary economic knowledge to apply in their future careers.

Focus on Application: While covering theoretical concepts, the syllabus also emphasizes the application of economic principles to real-world scenarios. This helps students develop analytical skills and problem-solving abilities, which are valuable in accounting and finance professions where decision-making is often based on economic considerations.

Comprehensive Coverage: The syllabus provides a comprehensive overview of various aspects of economics, including microeconomics, macroeconomics, and international economics. This ensures that students gain a holistic understanding of the discipline and its relevance to different areas of business and finance.

Integration with Other Subjects: The syllabus is integrated with other subjects in the CA Foundation curriculum, such as Business Laws and Business Mathematics, ensuring coherence and reinforcing learning across different domains. This interdisciplinary approach helps students develop a holistic understanding of business and finance. Overall, the CA Foundation Economics syllabus effectively equips students with the knowledge and skills required to analyse economic factors, make informed financial decisions, and contribute effectively to the accounting and finance profession.

Happy Reading and Best Wishes!



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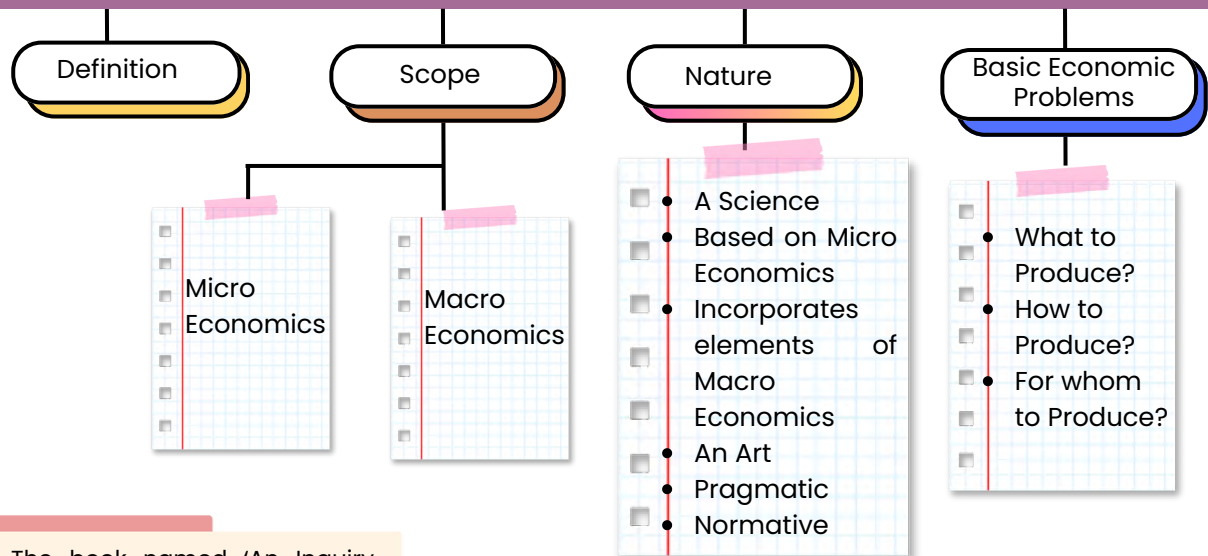
061 Indian Economy

(Before 1950– Chanakya and Nand Vansh, OECD Paper (1950–1991), Basic knowledge 1991 Onwards

BUSINESS ECONOMICS

- Economics deals with problems and questions that affect almost all kinds of individuals in their capacities as consumers and producers. Therefore, economic literacy is essential for everyone.
- Business Economics may be defined as the use of economic analysis to make business decisions involving the best use of an organization's scarce resources.
- The graphs and charts will assist them in revision of concept discussed in study material in minimum time.

NATURE AND SCOPE OF BUSINESS ECONOMICS



The book named 'An Inquiry into the Nature and Causes of the Wealth of Nations' (1776) usually abbreviated as 'The Wealth of Nations', by Adam Smith is considered as the first modern work of Economics.

Two fundamental facts: Human beings have unlimited wants 'The means to satisfy these unlimited wants are relatively scarce' form the subject matter of Economics

Micro Economics is basically the study of the behaviour of different individuals and organizations within an economic system

In Macro-Economics, we study the behaviour of the large economic aggregates, such as, the overall levels of output and employment, total consumption, total saving and total investment, exports, imports and foreign investment and also how these aggregates shift over time

While Business Economics is basically concerned with Micro Economics, Macro economic analysis also has got an important role to play.

Nature of Business Economics

- ✓ A Science
- ✓ Based on Micro Economics
- ✓ Incorporates elements of Macro Analysis
- ✓ Use of theory of Markets and Private Enterprises
- ✓ Pragmatic in Approach
- ✓ Normative in Nature
- ✓ Interdisciplinary in Nature

The scope of Business Economics is quite wide. It covers most of the practical problems a manager or a firm faces.

There are two categories of business issues to which economic theories can be directly applied,

Internal issues or operational issues (this can be solved using Micro Economics)

External issues or environmental issues (this can be solved using Macro Economics)

In Micro Economics we study about-

Product Pricing

Consumer Behaviour

Factor Pricing

Behaviour of firms

Location of Industry

The Economic condition of a section of people

In Macro Economics we study about-

National Income and National Output

Consumer Behaviour

The General Price Level and Interest Rates

The overall Level of Savings and Investment

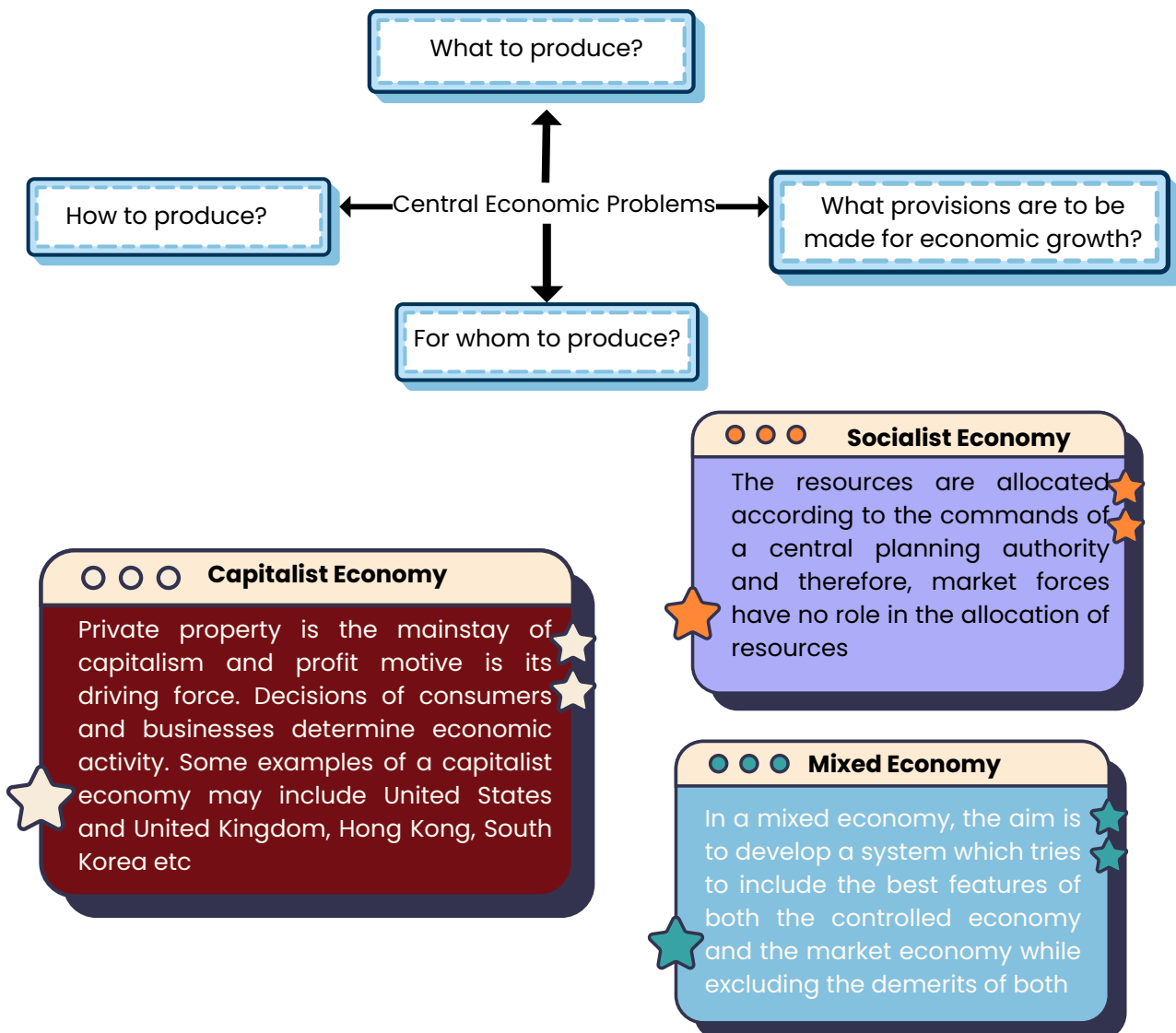
The Level of Employment and Rate of Economic Growth

External value of Currency

Basis of Difference	Economics	Business Economics
Meaning	It involves the framing of economic principles to solve economic problems.	It involves the application of economic principles to solve economic problems.
Character	It is microeconomic as well as macroeconomic in character.	It is microeconomic in character.
Main Task	The fulfilment of needs of individuals as well as entities.	Proper decision making in a particular business entity.
Nature	It is positive as well as normative in nature.	It is only normative in nature.
Scope	It has a wider scope.	It has a comparatively narrow scope.
Branches	It has business economics as its applied branch.	It is an applied branch of economics.
Concerned with	All the theories from production to consumption including distribution.	It is concerned with only profit theory ignoring other theories.
Analysis Involved	It includes the analysis of macro level issues like growth, inflation and employment, etc.	It includes the analysis of micro level issues like demand, supply and profit etc.
Concentration	It concentrates only on the economic aspects of any business problem.	It concentrates on both economic as well as non-economic aspects of any business problem.
Validity of Assumptions	It is based on certain assumptions.	Some assumptions become invalid when applied.

Business decisions cannot be taken without considering these present and future environmental factors. As the management of the firm has no control over these factors, it should fine-tune its policies to minimise their adverse effects.

BASIC PROBLEMS OF AN ECONOMY



MEANING OF DEMAND

Demand means desire or wish to buy and consume a commodity or service backed by adequate ability to pay and willingness to pay.

The law of demand states that people will buy more at lower prices and less at higher prices, other things being equal.

According to Marshall, the demand curve slopes downwards due to the operation of the law of diminishing marginal utility. However, according to Hicks and Allen it is due to income effect and substitution effect.

The demand curve usually slopes downwards; but exceptionally slopes upwards under certain circumstances as in the case of conspicuous goods, Giffen goods, conspicuous necessities, future expectations about prices, demand for necessities and speculative goods.

The **demand curve** will shift to the right when there is a rise in income (unless the good is an inferior one), a rise in the price of a substitute, a fall in the price of a complement, a rise in population and a change in tastes in favour of commodity. The opposite changes will shift the demand curve to the left.

A **demand schedule** is a table that shows various prices and the corresponding quantities demanded. The demand schedules are of two types:

- Individual demand schedule
- Market demand schedule

ELASTICITY OF DEMAND

Elasticity of demand is defined as the responsiveness of the quantity demanded of a good to changes in one of the variables on which demand depends.

1. PRICE ELASTICITY OF DEMAND

- Price Elasticity of Demand refers to the percentage change in quantity demanded of a commodity as a result of a percentage change in price of that commodity.
- As demand curve slopes downwards to the right, the sign of price elasticity is negative.
- We normally ignore the sign of elasticity and concentrate on the coefficient. Greater the absolute coefficient, greater is the price elasticity.
- In symbolic form, price elasticity = $E_p = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}$

2. INCOME ELASTICITY OF DEMAND

- Income elasticity of demand is the degree of responsiveness of quantity demanded of a good to changes in the income of consumers. In symbolic form, $E_y = \frac{\% \text{ change in demand}}{\% \text{ change in income}}$
- For all normal goods, income elasticity is positive, on the other hand, goods having negative income elasticity are known as inferior goods.
- If the income elasticity for a good is greater than one, such goods are called luxury goods. On the other hand, if the income elasticity is less than one, it is a necessity.

3. CROSS ELASTICITY OF DEMAND

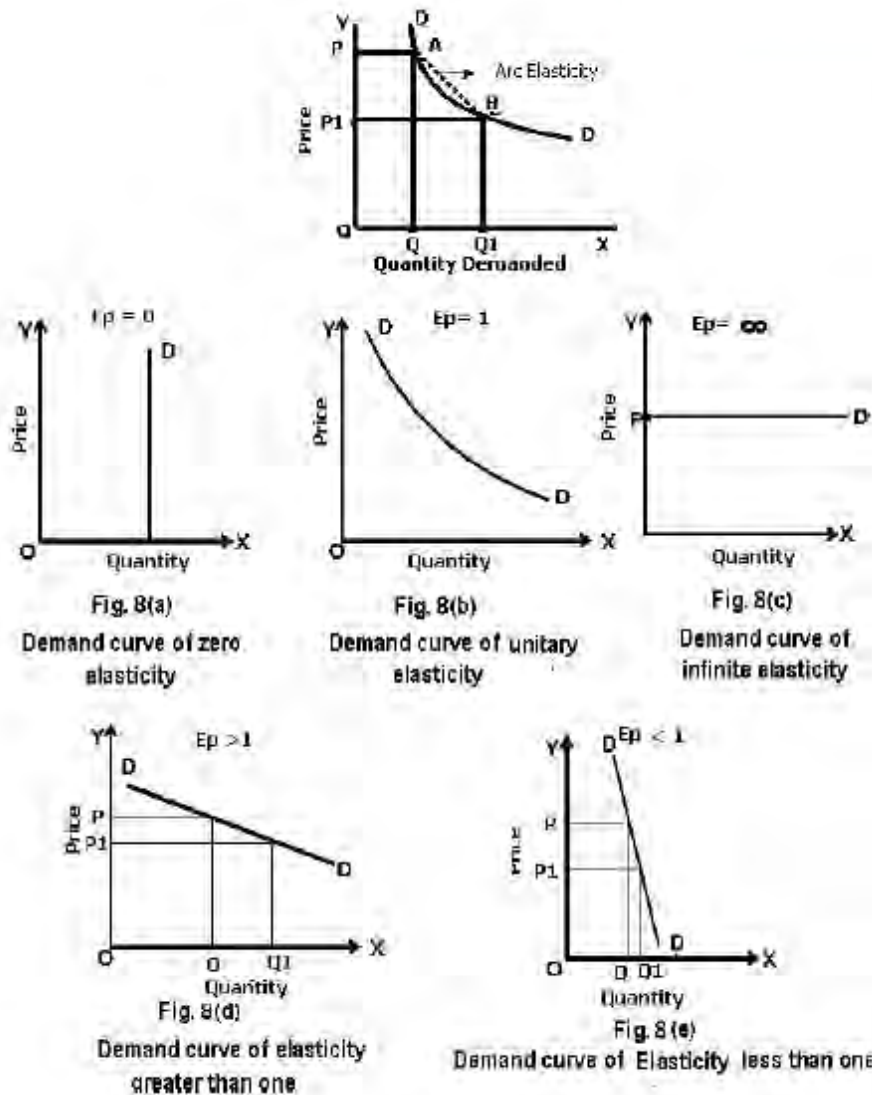
The cross elasticity of demand is the percentage change in the quantity demanded of commodity X as a result of a percentage change in the price of some related commodity Y.

4. POINT ELASTICITY OF DEMAND

In point elasticity we measure elasticity at a given point on a demand curve. When it is positive, price change is somewhat larger or when price elasticity is to be found between two prices or two points on positive demand curve, we use ARC Elasticity.

5. ARC ELASTICITY

When price and quantity changes are discrete and large, we have to measure elasticity over an arc of the demand curve.



DIFFERENCE BETWEEN DEMONSTRATION/BANDWAGON EFFECT AND SNOB EFFECT

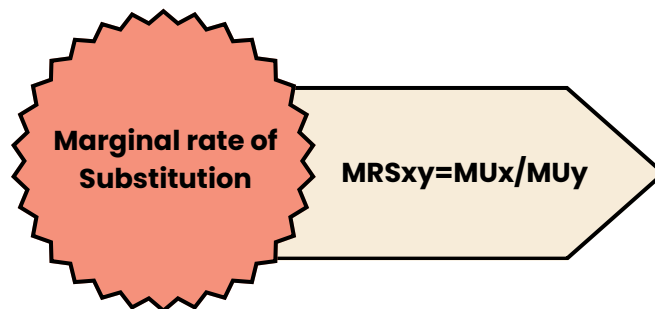
Demonstration/Bandwagon Effect	Snob Effect
It is a psychological effect in which people do the same what others are doing. They do not have their own belief and thinking.	It is understood as the desire to possess a unique commodity having a prestige value. It is quite opposite to the bandwagon or demonstration effect.
It leads to increase in demand of a particular commodity.	It leads to decrease in demand of a particular commodity.
Example: When some people start investing money in share market then many people start following the same without considering its advantages and disadvantages.	Example: If Miss. X and Miss. Y are rich rivals of each other and if in any party Miss. X wears an expensive dress and on seeing it Miss. Y who also having the same dress decided to reject the use of the same dress further. Rather Miss. Y will try to use even more expensive one.

DEMAND FORECASTING

Forecasting of demand is the art and science of predicting the probable demand for a product or a service at some future date on the basis of certain past behaviour patterns of some related events and the prevailing trends in the present.

UTILITY

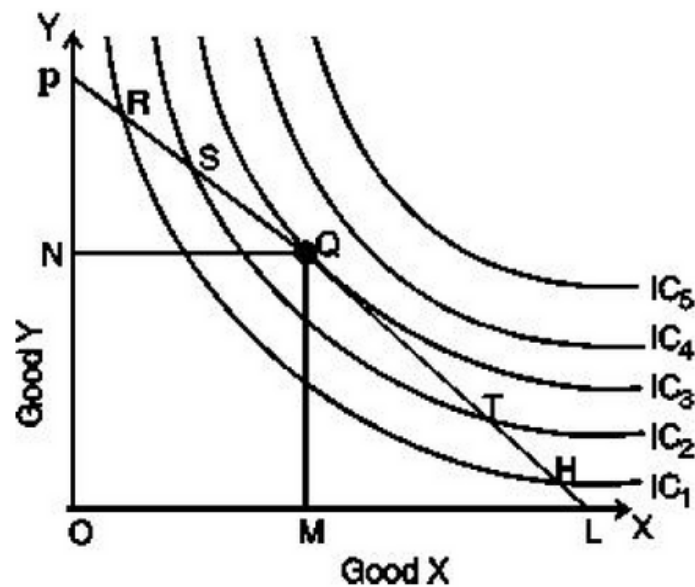
- The utility of a consumer is a measure of the satisfaction that the consumer expects to obtain from consumption of goods and services when he spends money on a stock of commodity which has the capacity to satisfy his want.
- Two important theories are (i) Marginal Utility Analysis propounded by Alfred Marshall, and (ii) Indifference Curve Analysis propounded by J R Hicks and R G D Allen.
- The law of diminishing marginal utility states that as a consumer increases the consumption of a commodity, every successive unit of the commodity gives lesser and lesser satisfaction to the consumer.
- The indifference curve theory, which is an ordinal theory, shows the household's preference between alternative bundles of goods by means of indifference curves.
- The important properties of an Indifference curve are Indifference curve slopes downwards to the right, it is always convex to the origin, two ICs never intersect each other, it will never touch the axes and higher the indifference curve higher is the level of satisfaction.
- The consumer attains equilibrium at the point where the budget line is tangent to the indifference curve and $MUX / PX = MUY / PY = MUZ / PZ$



Budget Line/ Price Line

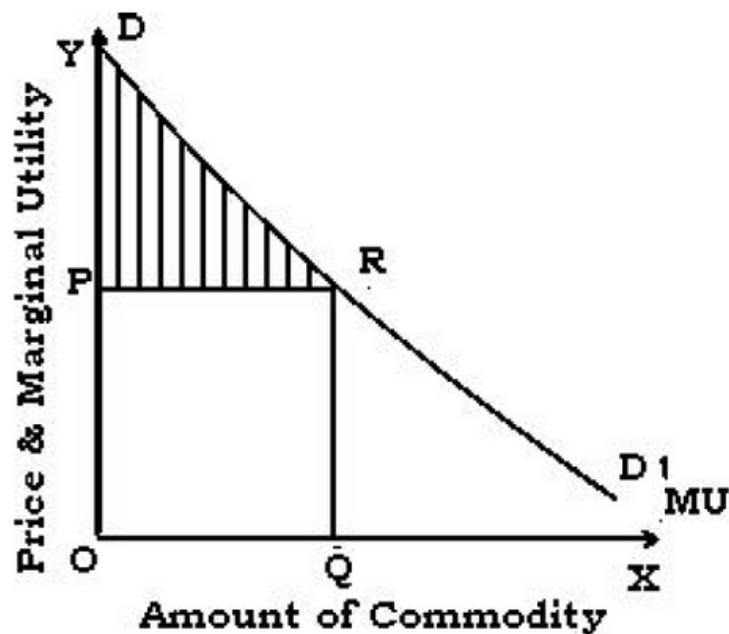
- Budget line or price line shows all those combinations of two goods which the consumer can buy spending his given money income on the two goods at their given prices.
- The slope of the budget line is determined by the relative prices of the two goods. It is equal to 'Price Ratio' of two goods. i.e. PX / PY i.e. It measures the rate at which the consumer can trade one good for the other.

(CONSUMER'S EQUILIBRIUM)

**Consumer's Surplus**

What a consumer is ready to pay - What he actually pays

(CONSUMER SURPLUS)

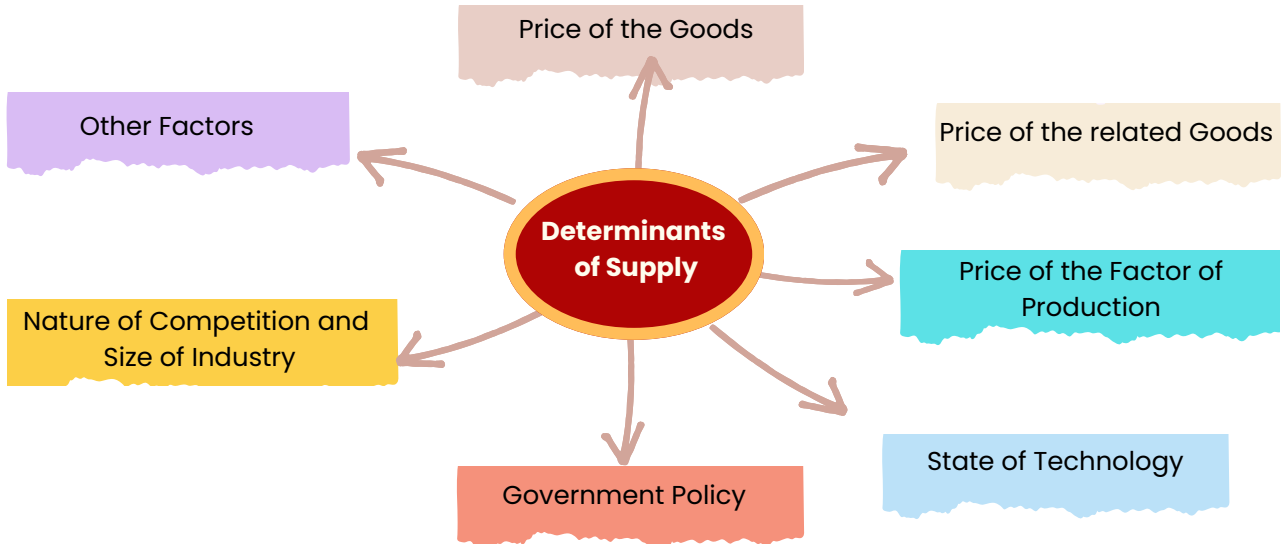
**Substitute/ Complement**

When two goods are perfect substitutes of each other, indifference curves for these two goods are straight, parallel lines with a constant slope along the curve, or the indifference curve has a constant MRS.

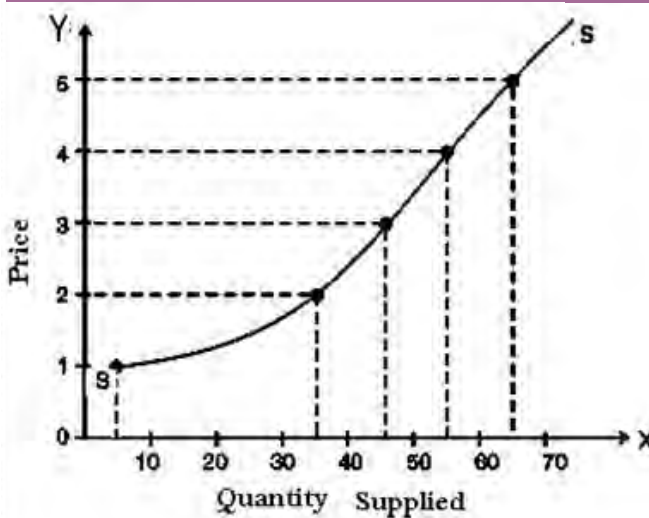
Goods are perfect complements when a consumer is interested in consuming only in fixed proportions. In such a case, the indifference curve will consist of two straight lines with a right angle bent which is convex to the origin, or in other words, it will be L shaped.

SUPPLY

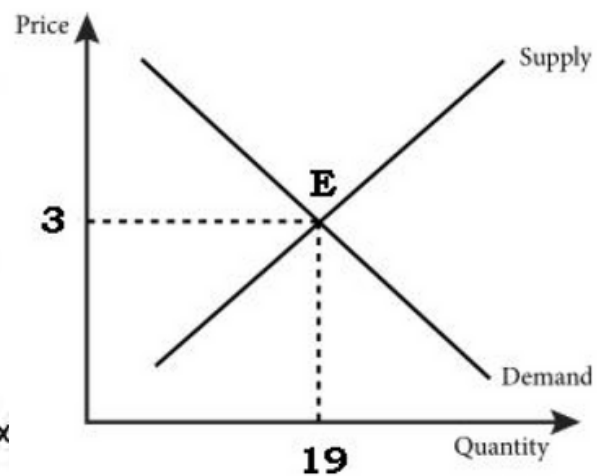
The term 'supply' refers to the amount of a good or service that the producers are willing and able to offer to the market at various prices during a given period. The law of supply can be stated as: Other things remaining constant, the quantity of a good produced and offered for sale will increase as the price of the good rises and decrease as the price falls.



(SUPPLY CURVE)

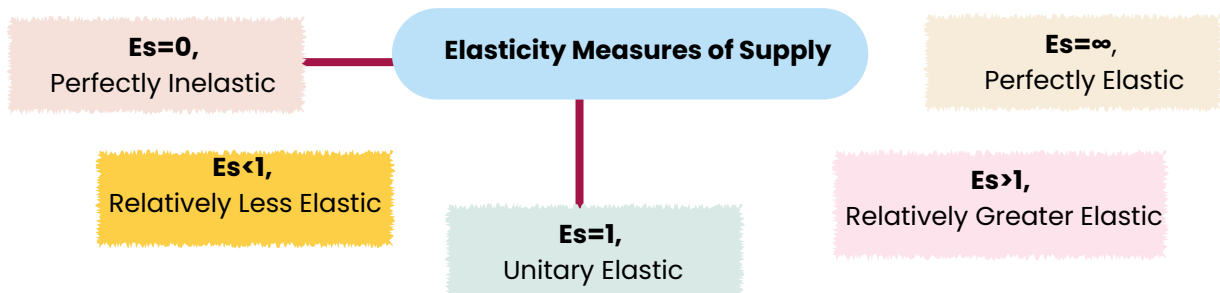


EQUILIBRIUM PRICE



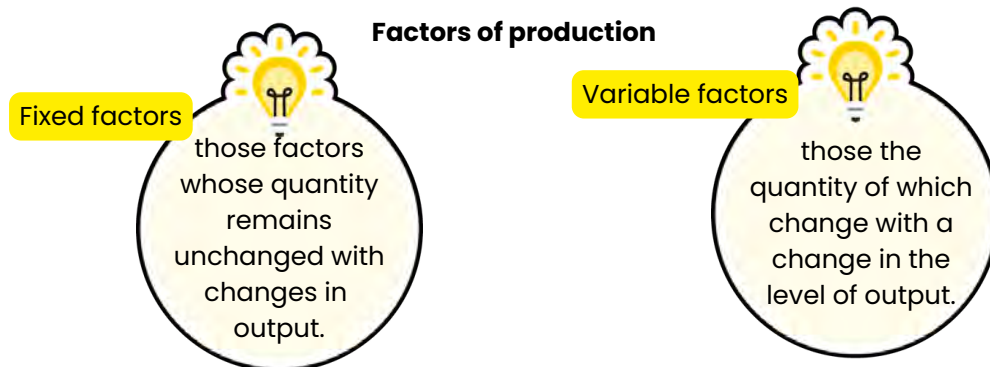
ELASTICITY OF SUPPLY

It measures the responsiveness of the quantity supplied of a good to a change in its price.



PRODUCTION

Production is the outcome of the combined activity of the four factors of production viz, land, labour, capital and organization. In simple terms production, means 'creation of utility'. i.e. Utility of form, utility of place, utility of time and personal utility.



Production Function

- The production function is a statement of the relationship between a firm's scarce resources (i.e. its inputs) and the output that results from the use of these resources.
- The production function can be algebraically expressed in the form of an equation in which the output is the dependent variable and inputs are the independent variables.
- The equation is : $Q = f(a, b, c, d, \dots, n)$ Where 'Q' stands for the rate of output of given commodity and a, b, c, d,.....n, are the different factors (inputs) and services used per unit of time.

Short-Run Vs Long-Run Production Function

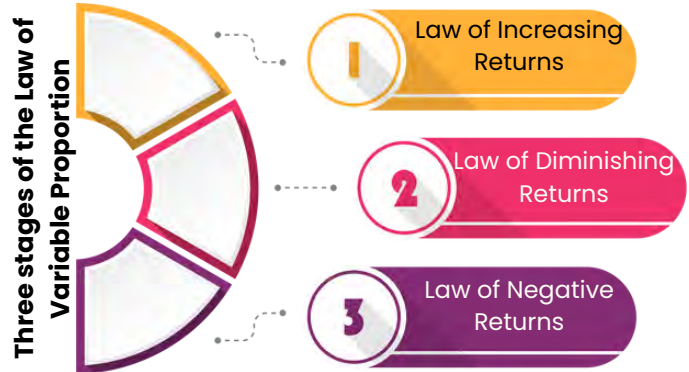
The short-run is a period of time in which at least one of the inputs used remains unchanged during that period.	The long run is a period of time in which all factors of production are variable.
In the short run, a firm cannot install a new capital equipment to increase production.	It is a time period when the firm will be able to install new machines and capital equipments apart from increasing the variable factors of production.
The behaviour of production is the subject matter of the law of variable proportion.	The behaviour of production is the subject matter of the law of returns to scale.

Cobb-Douglas Production Function

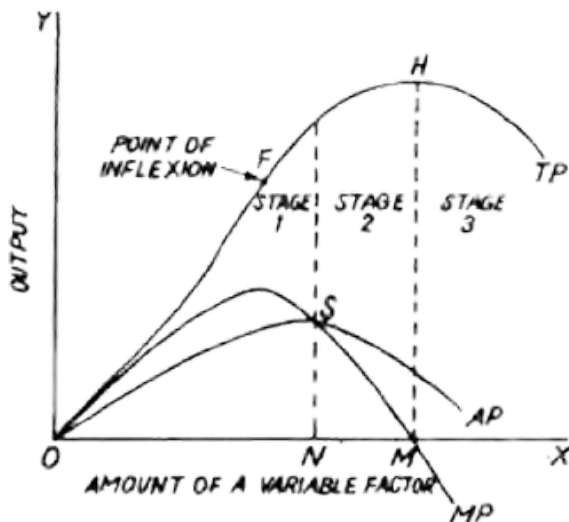
- It stated as $Q = K^a L^b C^c$
- Where Q is output, L the quantity of labour, C quantity of capital, K and a are positive constants

LAW OF VARIABLE PROPORTIONS

The law of variable proportion or the law of diminishing returns is relevant when some factors are kept fixed and others are varied. It is applicable to the short-run.



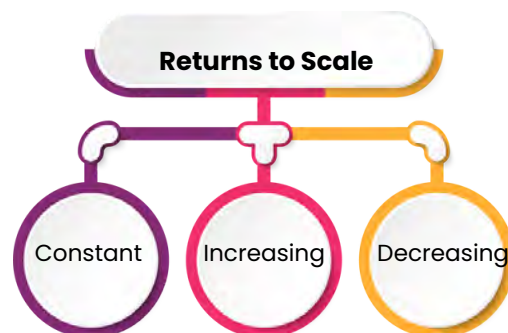
LAW OF VARIABLE PROPORTIONS



Stage 1 Law of increasing returns.
 Stage 2 law of diminishing returns.
 Stage 3 Law of negative returns.

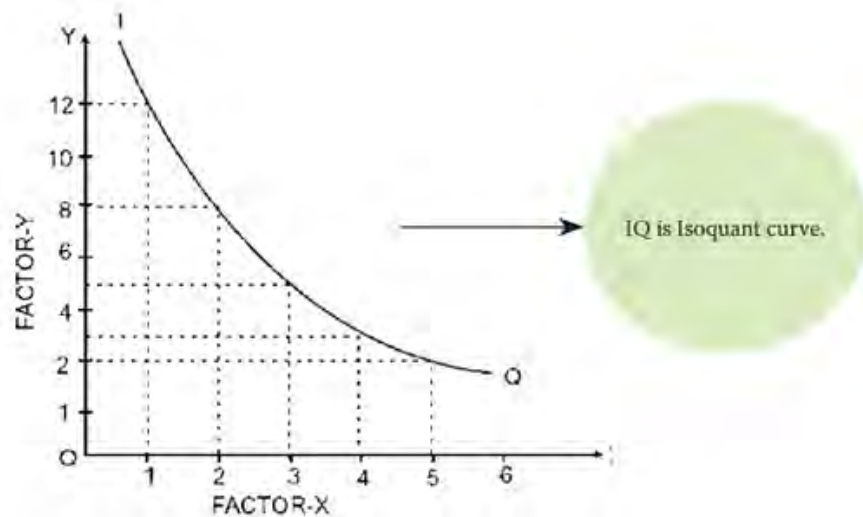
RETURNS TO SCALE

It describes the relationship between inputs and output in the long run when all inputs are changed in the same proportion.



ISOQUANTS

Isoquants or product indifference curves show all those combinations of different factors of production which give the same output to the producer.



ISOCOST LINES

It shows various combinations of two factors which the firm can buy with given expenditure or outlay.

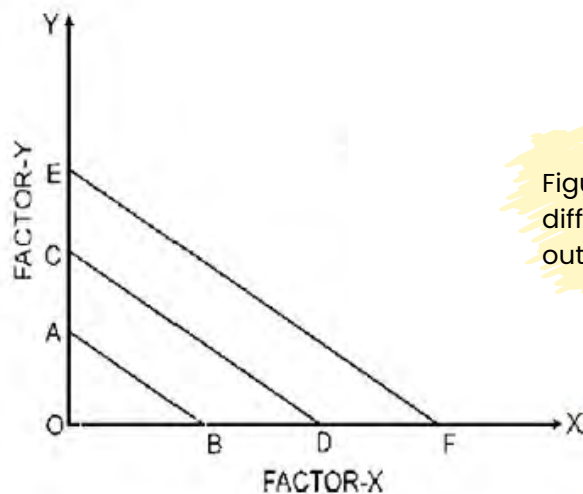
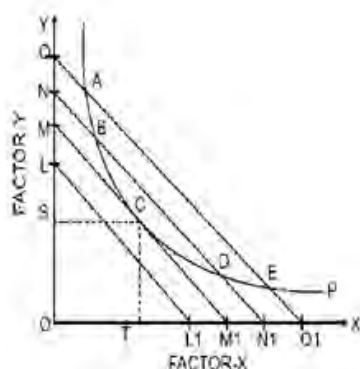


Figure shows various isocost lines representing different combinations of factors with different outlays. AB, CD and EF are Iso-cost lines.

LEAST COST COMBINATION

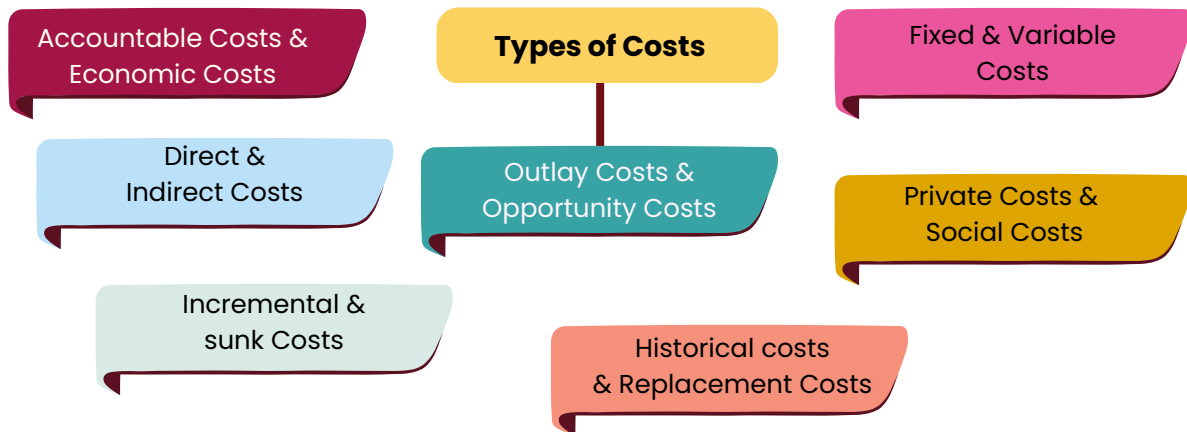
For producing a given output, the tangency point of the relevant isoquant (representing the output) with an isocost line represents the least cost combination of factors.



C is the tangency point of the given isoquant with an isocost line represents the least cost combination of factors for producing a given output.

COST ANALYSIS

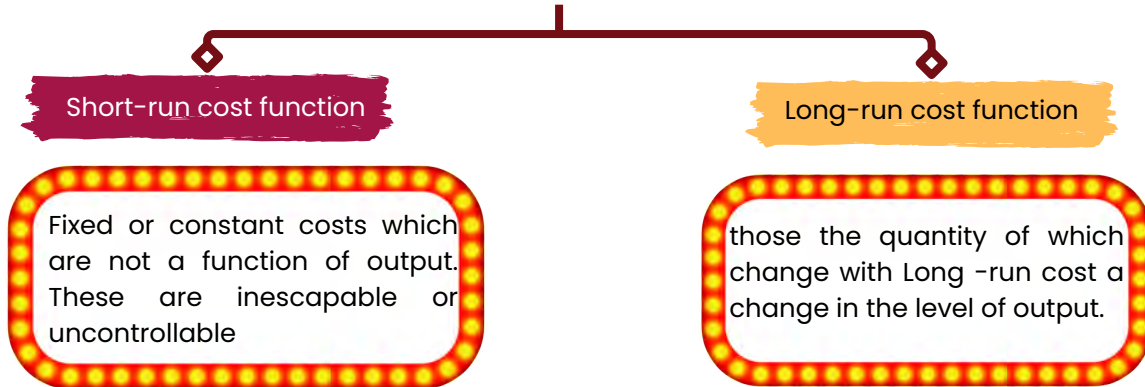
It refers to the study of behaviour of cost in relation to one or more production criteria. It is concerned with the financial aspects of production.



COST FUNCTION

The cost function refers to the mathematical relation between cost and the various determinants of cost. It expresses the relationship between cost and output. Economists are generally interested in two types of cost functions; the short run cost function and the long run cost function.

Cost Function is divided into two

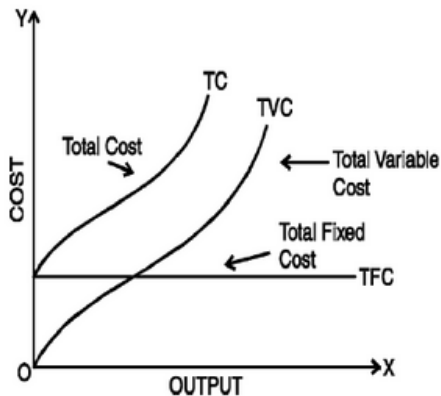


TYPES OF COSTS

- Total cost of a business is defined as the actual cost that must be incurred for producing a given quantity of output.
- AFC is obtained by dividing the total fixed cost by the number of units of output produced.
- Average variable cost is found out by dividing the total variable cost by the number of units of output produced.
- Average total cost is the sum of average fixed cost and average variable cost.
- Marginal cost is the addition made to the total cost by the production of an additional unit of output.
- Long run cost of production is the least possible cost of producing any given level of output when all individual factors are variable

THE SHORT RUN TOTAL COST

- The short run total cost is composed of two major elements namely, total fixed cost and total variable cost.
- Symbolically $TC = TFC + TVC$



TFC curve starts from a point on the Y-axis shows that fixed costs will be incurred even if the output is zero. On the other hand, the TVC curve rises upward indicating that as output increases, total variable cost increases. The TVC curve starts from the origin because variable costs are zero when the output is zero. The TC curve has been obtained by adding vertically the TFC curve and the TVC curve.

RELATIONSHIP BETWEEN AVERAGE COST AND MARGINAL COST

- When average cost falls as a result of an increase in output, marginal cost is less than average cost.
- When average cost rises as a result of an increase in output, marginal cost is more than average cost.
- When average cost is minimum, marginal cost is equal to the average cost. In other words, marginal cost curve cuts average cost curve at its minimum point (i.e. optimum point).

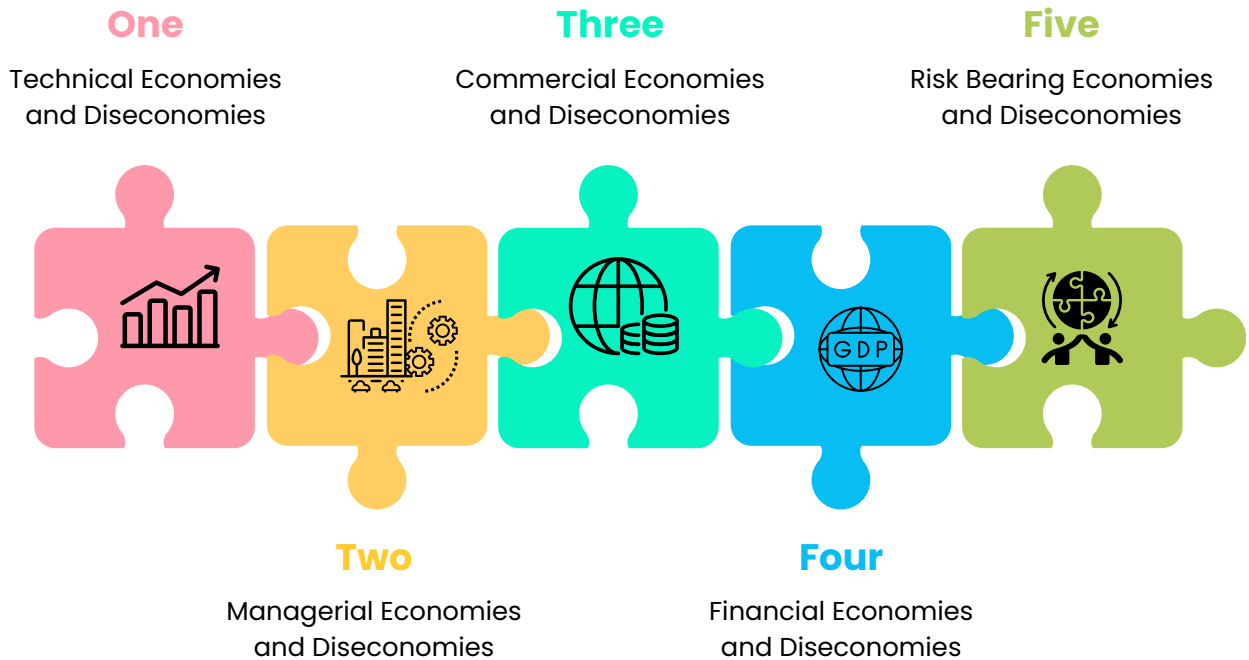
THE LONG RUN AVERAGE COST CURVE(LAC)

- The long run average cost curve, often called a planning curve, is so drawn as to be tangent to each of the short run average cost curves.

ECONOMIES OF SCALE AND DISECONOMIES OF SCALE

- When increase in scale is upto optimum level, then it is economies of scale. On the other hand, increase in scale beyond the optimum level, results in diseconomies of scale.
- Economies of scale is of two types-
- Internal economies of scale which accrue to a firm when it engages in large scale production and External economies of scale accrue to a firm due to factors which are external to a firm.

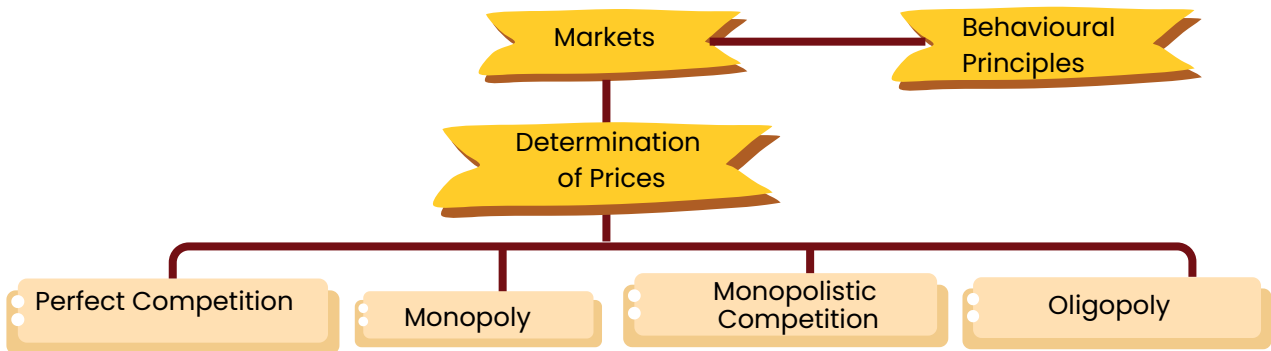
KINDS OF INTERNAL ECONOMIES AND DISECONOMIES



KINDS OF EXTERNAL ECONOMIES AND DISECONOMIES



PRICE DETERMINATION IN DIFFERENT MARKETS



MARKET

Market is the whole set of arrangements for buying and selling of a commodity or service. Here, buyers and sellers bargain over price of a commodity.

The elements of a market are:

- Buyers and sellers;
- A product or service;
- Bargaining for a price;
- Knowledge about market conditions; and
- One price for a product or service at a given time.

In Economics, generally the classification of markets is made on the basis of:

- Geographical Area
- Time
- Nature of transaction
- Regulation
- Volume of business
- Type of Competition

Spot or cash Market

Spot transactions or spot markets refer to those markets where goods are exchanged for money payable either immediately or within a short span of time. For example, grains sold in the Mandi at the current prices and cash is paid immediately. Thus is a part of Spot Market.

Forward or Future Market

In this market, transactions involve contracts with a promise to pay and deliver goods at some future date. For example, purchase of foreign currency contract at future rate from bank.

Wholesale Market

The wholesale market is the market where the commodities are bought and sold in bulk or large quantities. Transactions generally take place between traders. i.e. Business to Business (B2B).

Retail Market

When the commodities are sold in small quantities, it is called retail market. This is the market for ultimate consumers. i.e. Business to Consumer (B2C).

THEORETICAL MARKET

Perfect Competition

Perfect competition is characterised by many sellers selling identical products to many buyers

Monopolistic Competition

It differs in only one respect. Namely, there are many sellers offering differentiated products to many buyers. For example, shampoo manufacturers.

Monopoly

It is a situation where there is a single seller producing for many buyers. Its product is necessarily extremely differentiated since there are no competing sellers producing products which are close substitutes. For example, Indian Railways

Oligopoly

There are a few sellers selling competing products to many buyers. For example, Telecom Industry.

Assumption	Market Types			
	Perfect Competition	Monopolistic Competition	Oligopoly	Monopoly
Number of sellers	Very large	Large	Small Numbers	One
Product differentiation	None	Slight	None to substantial	Extreme
Price elasticity of demand of a firm	Infinite	Large	Small	Small
Degree of control over price	None	Some	Some	Very considerable

CONCEPTS OF TOTAL REVENUE, AVERAGE REVENUE & MARGINAL REVENUE

Total revenue refers to the amount of money which a firm realises by selling certain units of a commodity.

Average revenue is the revenue earned per unit of output.

Marginal revenue is the change in total revenue resulting from the sale of an additional unit of the commodity.

$$MR = AR \times e - 1$$

Where e = price elasticity of demand

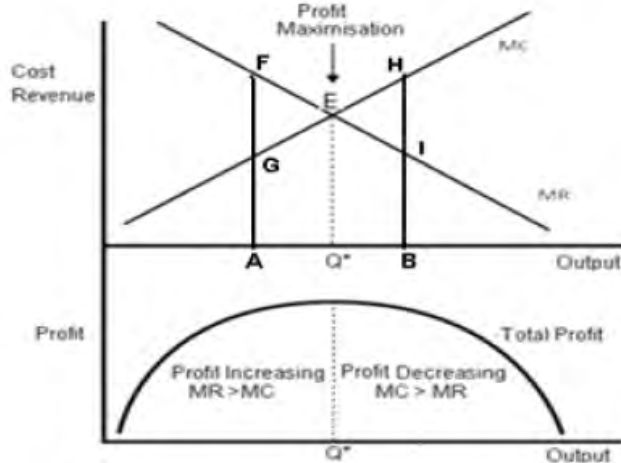


Behavioural Principle

Principle 1- A firm should not produce at all if its total variable costs are not met.

Principle 2 - The firm will be making maximum profits by expanding output to the level where marginal revenue is equal to marginal cost.

Equilibrium of the Firm: Maximisation of Profits

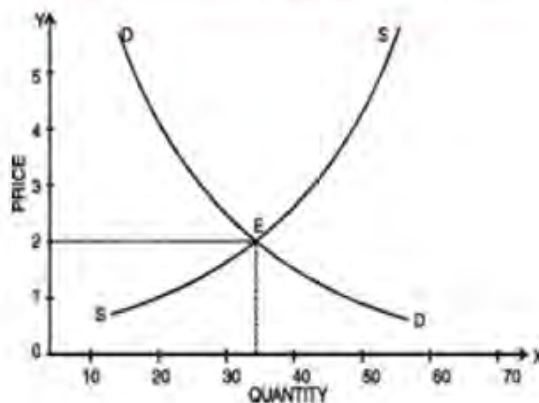


The firm will maximise profits at the point at which marginal revenue is equal to marginal cost.

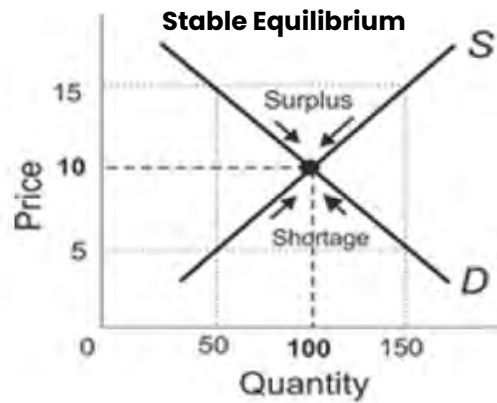
DETERMINATION OF PRICES

In an open competitive market, it is the interaction between demand and supply that tends to determine equilibrium price and quantity

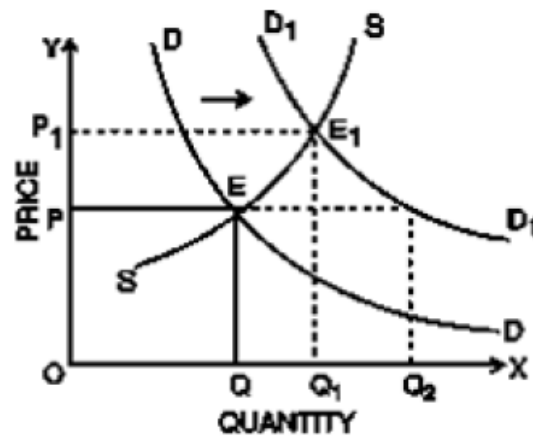
Determination of Equilibrium Price



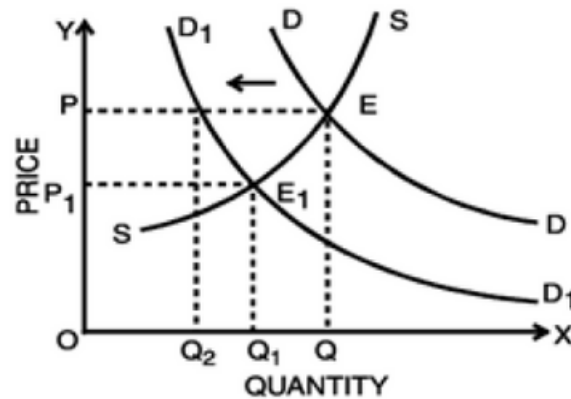
Stable equilibrium is achieved through price mechanism or market mechanism. If the market price is above the equilibrium price, the market supply is greater than market demand and there is an excess supply or surplus in the market. Competing sellers will lower prices in order to clear their unsold stock. As we know, other things remaining constant, as price falls quantity demanded rises and quantity supplied falls. In this process, the supply-demand gap is reduced and eventually eliminated thus restoring equilibrium.



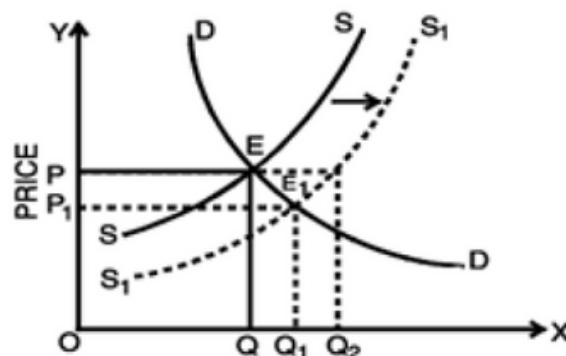
Increase in Demand, causing an increase in equilibrium price and quantity



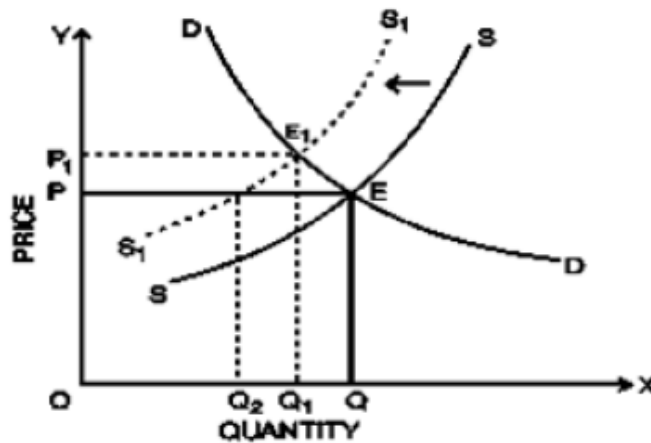
Decrease in demand resulting in a decrease in price and quantity demanded



Increase in supply, resulting in decrease in equilibrium price and increase in quantity supplied

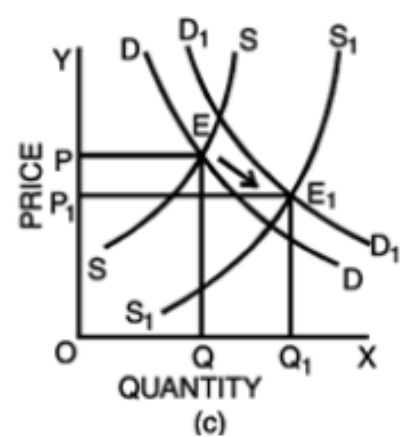
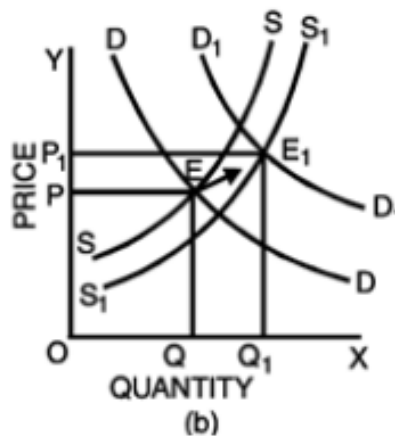
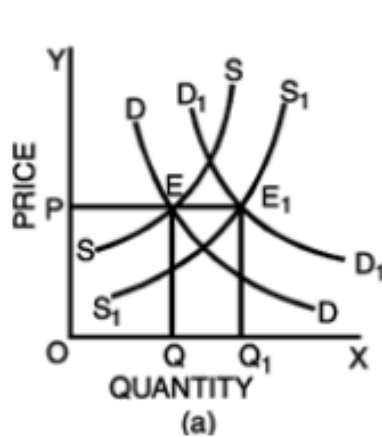


Decrease in supply causing an increase in the equilibrium price and a fall in quantity demanded



It sometimes happens that events shift both the demand and supply curves at the same time. This is not unusual in real life, supply curves and demand curves for many goods and services typically shift quite often because of continuous change in economic environment. During a war, for example, shortage of goods will often lead to decrease in their supply while full employment causes high total wage payments which increase demand.

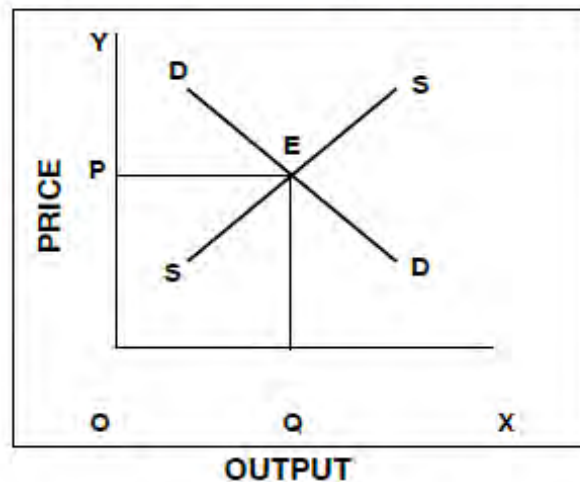
Simultaneous change in demand and supply



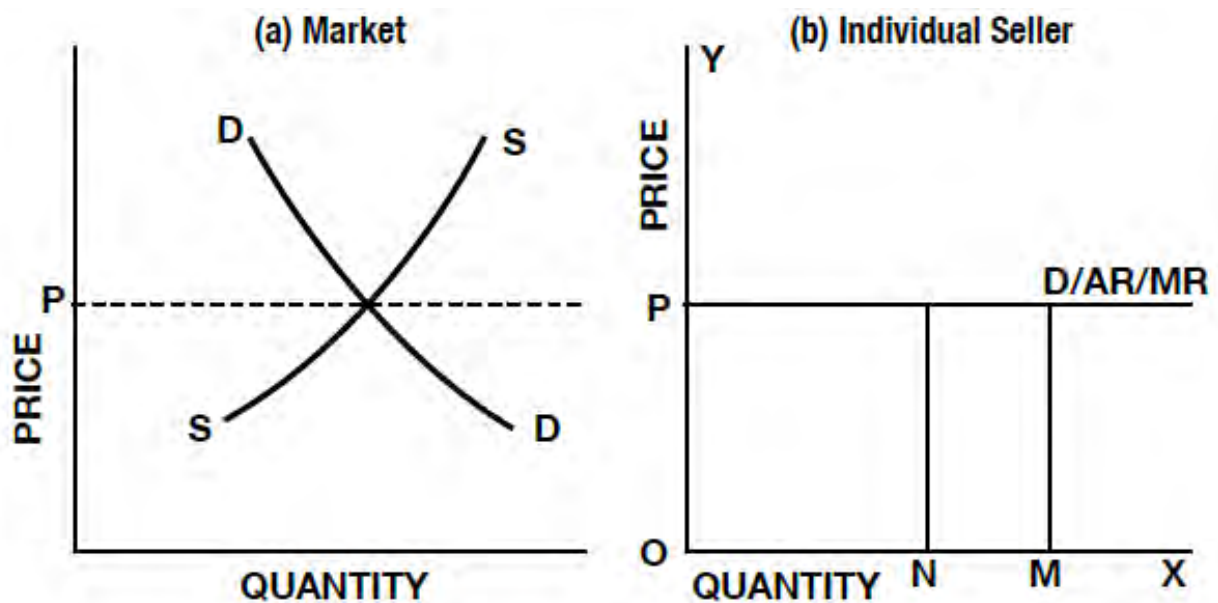
PERFECT COMPETITION

A market is said to be perfectly competitive if it has large number of buyers and sellers, homogeneous product, free entry and exit, perfect mobility of factors of production, perfect knowledge about the market conditions, insignificant transaction costs, no government interference and absence of collusion.

Price Determination under Perfect Competition



(Equilibrium of a Competitive Industry)



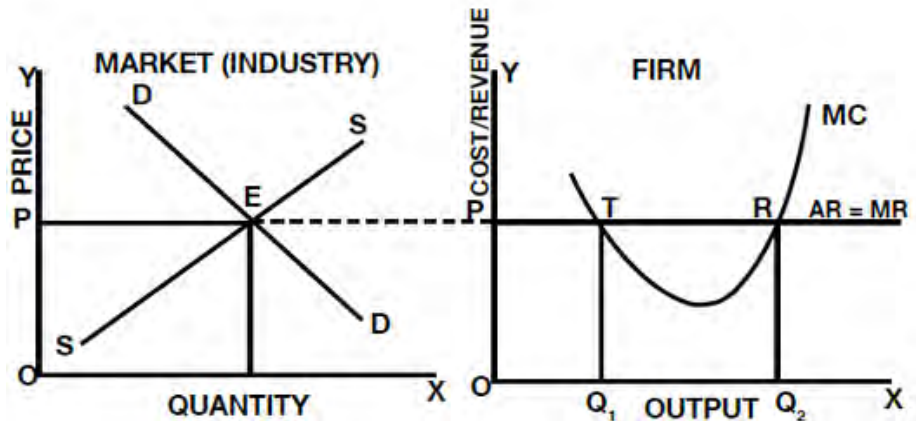
The firm's demand curve under perfect competition

EQUILIBRIUM OF THE FIRM

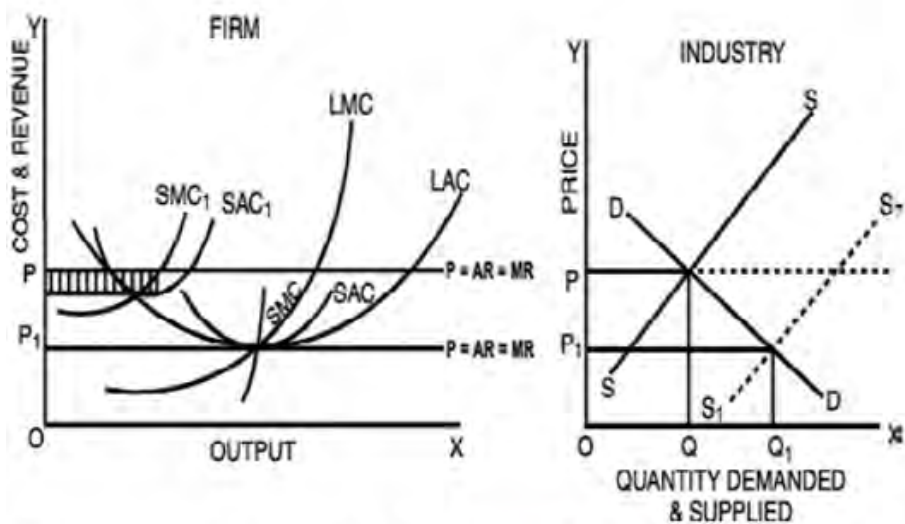
Conditions for the Equilibrium of an individual firm:

$MC = MR$

MC curve must cut MR curve from below



(Equilibrium position of a firm under perfect competition)

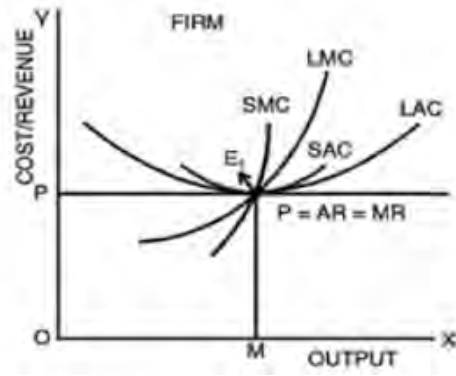
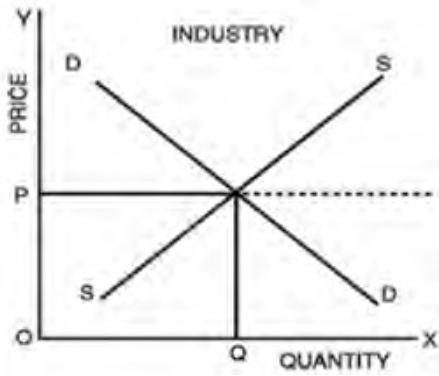


(Long run equilibrium of the firm in a perfectly competitive market)

In the long Run,
 $SMC = LMC = SAC = LAC = P = MR$



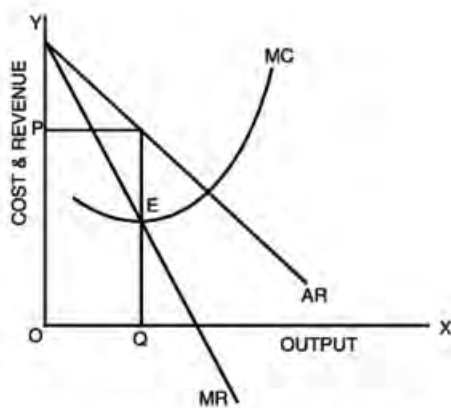
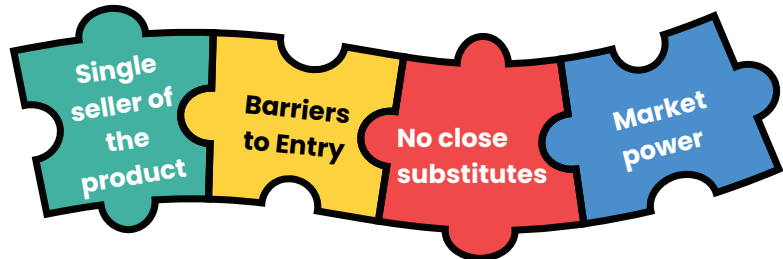
In the long Run all the Supernormal Profits or losses get wiped away with entry or exit of the firms from the Industry and all firms earn normal profit.



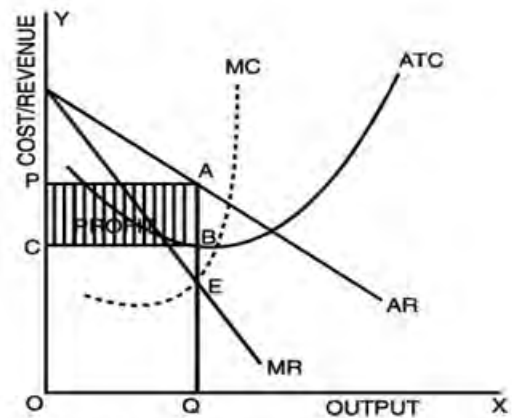
MONOPOLY

Monopoly is an extreme form of imperfect competition with a single seller of a product which has no close substitute.

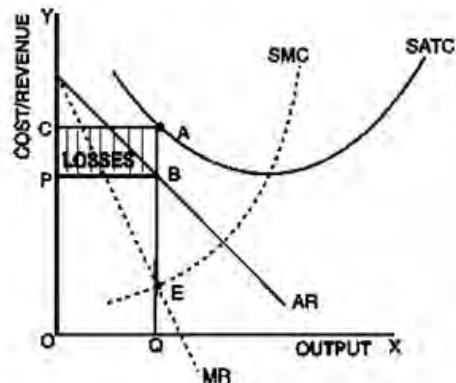
Major features of the Monopoly Market



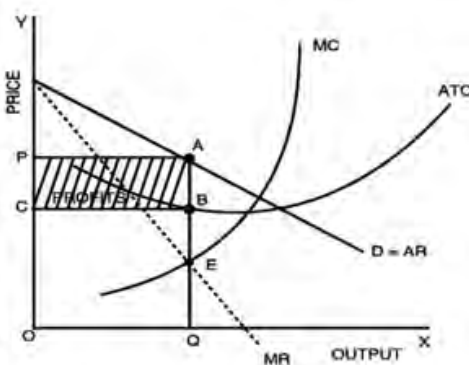
(Equilibrium of a monopolist (Short run))



(Firm's equilibrium under monopoly: Maximisation of profits)



(Equilibrium of the monopolist: Losses in the short run)



(Long run equilibrium of a monopolist)

PRICE DISCRIMINATION

Price Discrimination is a method of pricing adopted by a monopolist in order to earn abnormal profits. It refers to the practices of charging different prices for different units of the same commodity.

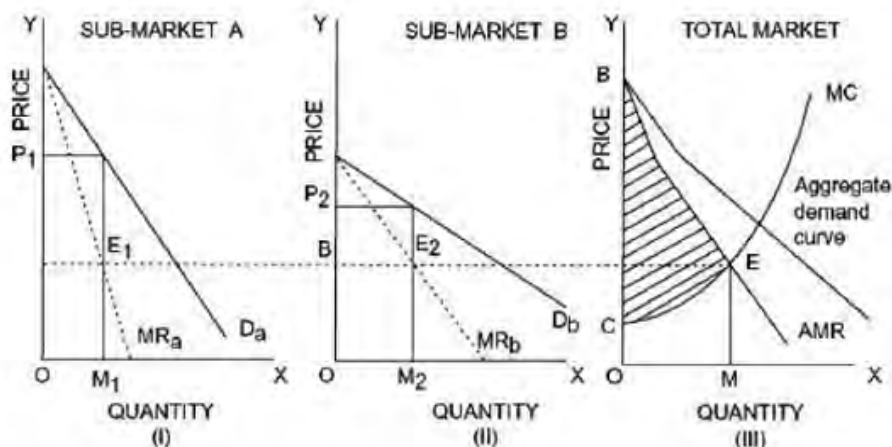
Conditions for price discrimination:

- The firm should have price-setting power,
- The seller should be able to divide his market into two or more submarkets.
- The price elasticity of the product should be different in different submarkets,
- There must be no market arbitrage.

Objectives of Price discrimination:

- To earn maximum profit
- To dispose off surplus stock
- To enjoy economies of scale
- To capture foreign markets and
- To secure equity through pricing.

Equilibrium under price discrimination



(Fixation of Total Output and Prices in the two Sub-markets by Discriminating Monopolist)

Prof. Pigou classified three degrees of price discrimination

FIRST DEGREE

Under the first degree price discrimination, the monopolist separates the market into each individual consumer and charges them the price they are willing and able to pay and thereby extract the entire consumer surplus. Doctors, lawyers, consultants etc.

SECOND DEGREE

Under the second degree price discrimination, different prices are charged for different quantities of sold. The monopolist will take away only a part of the consumers' surplus.

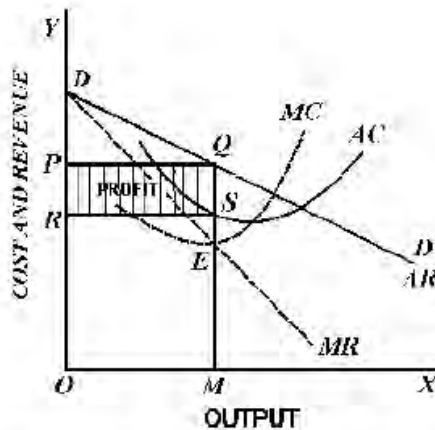
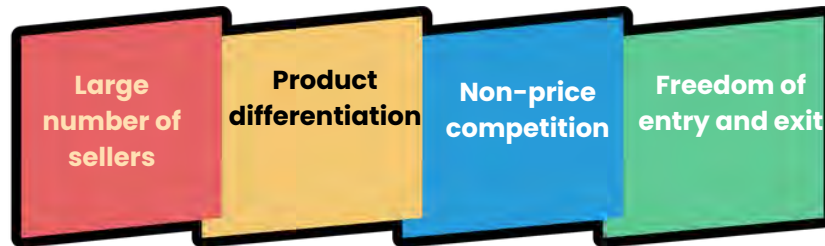
THIRD DEGREE

Under the third degree price discrimination, price varies by attributes such as location or by customer segment, example dumping.

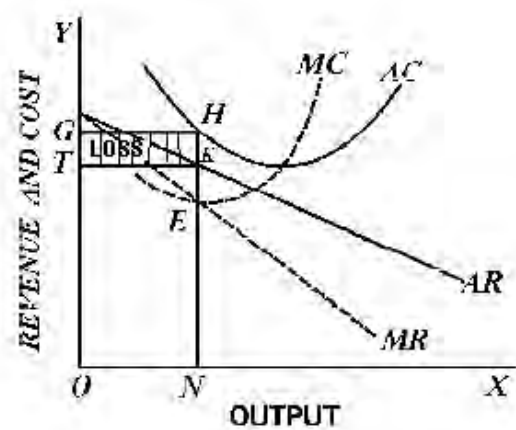
MONOPOLISTIC COMPETITION

- The essential feature of monopolistic competition is the existence of large number of firms, product differentiation, non price competition, high selling costs and freedom of entry and exit of firms.

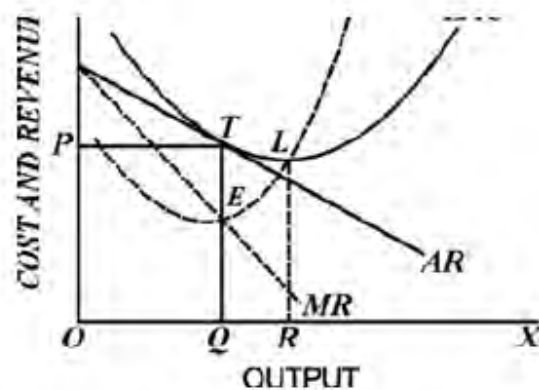
In monopolistic competition, the features of monopoly and perfect competition are partially present:



(Price-output determination under monopolistic competition)



(Short Run equilibrium of the Firm; losses)



(Long Run equilibrium of the Firm in Monopolistic Competition)

OLIGOPOLY

Prof. Stigler defines oligopoly as that "situation in which a firm bases its market policy, in part, on the expected behaviour of a few close rivals".

TYPES OF OLIGOPOLY



Strategic Interdependence

CHARACTERISTICS OF OLIGOPOLY MARKET



Importance of advertising and selling costs



Group behavior

PRICE AND OUTPUT DECISIONS IN AN OLIGOPOLISTIC MARKET

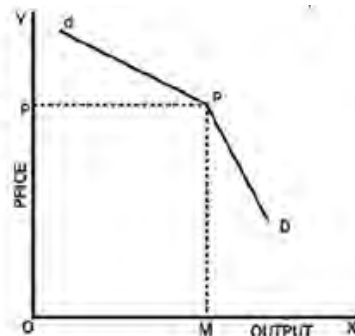
When an oligopolistic firm changes its price, its rival firms will retaliate or react and change their prices which in turn would affect the demand of the former firm. Therefore, an oligopolistic firm cannot have sure and determinate demand curve, since the demand curve keeps shifting as the rivals change their prices in reaction to the price changes made by it.

PRICE LEADERSHIP

A group of firms that explicitly agree (collude) to coordinate their activities is called a cartel.

KINKED DEMAND CURVE

The demand curve facing an oligopolistic, according to the kinked demand curve hypothesis, has a 'kink' at the level of the prevailing price. It is because the segment of the demand curve above the prevailing price level is highly elastic and the segment of the demand curve below the prevailing price level is inelastic.



IMPORTANT MARKET FORMS

MONOPSONY

is a market characterized by a single buyer of a product or service and is mostly applicable to factor markets in which a single firm is the only buyer of a factor.

OLIGOPSONY

is a market characterized by a small number of large buyers and is mostly relevant to factor markets.

DUOPOLY

a subset of oligopoly, is a market situation in which there are only two firms in the market.

BILATERAL MONOPOLY

is a market structure in which there is only a single buyer and a single seller i.e. it is a combination of monopoly market and a monopsony market.

BUSINESS CYCLE

Business cycle refers to alternate expansion and contraction of overall business activity as manifested in fluctuations in measures of aggregate economic activity, such as, gross national product, employment and income.

Phases of business cycle

- Expansion
- Peak
- Contraction
- Trough

Expansion:

The expansion phase is characterised by increase in national output, employment, aggregate demand, capital and consumer expenditure, sales, profits, rising stock prices and bank credit.

Peak:

The term peak refers to the top or the highest point of the business cycle

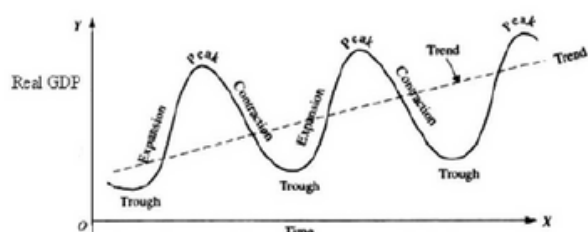
Contraction:

The economy cannot continue to grow endlessly. Once peak is reached, increase in demand is halted and starts decreasing in certain sectors.

Trough:

At the depth of depression, all economic activities touch the bottom and the phase of trough is reached

A noteworthy characteristic of these economic fluctuations is that they are recurrent and occur periodically.



CAUSES OF BUSINESS CYCLE**1****INTERNAL CAUSES**

- Fluctuations in Effective Demand
- Fluctuations in Investment
- Variations in government spending
- Macroeconomic policies
- Money Supply
- Psychological factors

2**EXTERNAL CAUSES**

- War
- Post War Reconstruction
- Technology shock
- Natural Factors
- Population growth

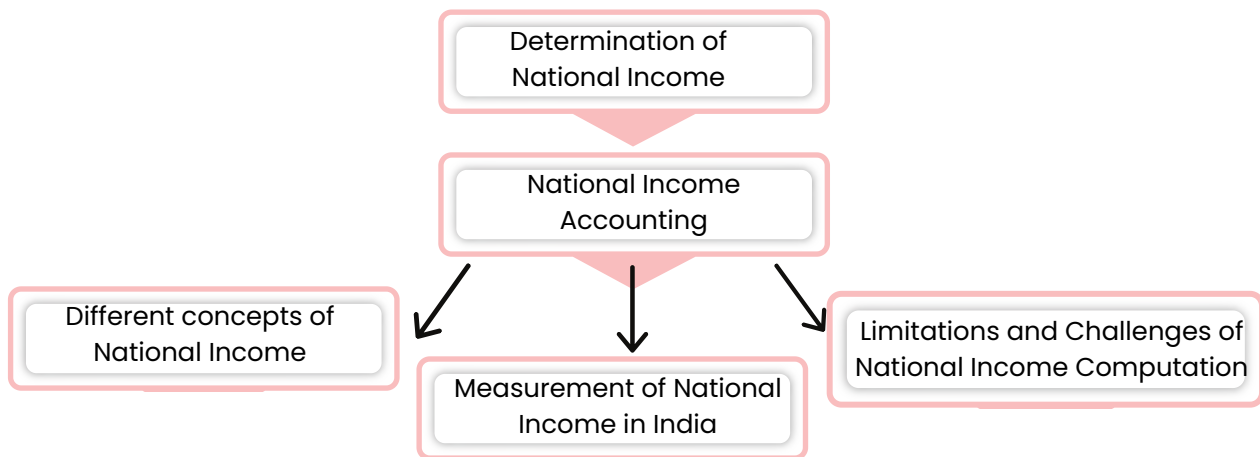
Examples of Business Cycle :

- Great Depression of 1930
- Information Technology bubble burst of 2000
- Global Economic Crisis (2008-09)

Business cycles are contagious and are international in character. They begin in one country and mostly spread to other countries through trade relations.

The phase of the business cycle is important for a new business to decide on entry into the market.

NATIONAL INCOME ACCOUNTING



INTRODUCTION

Just as there are accounting conventions which measure the performance of business, there are conventions for measuring and analysing the economic performance of a nation.

National Income Accounting, pioneered by the Nobel prize-winning economists Simon Kuznets and Richard Stone, is one such measure.

NATIONAL INCOME

National Income is defined as the net value of all economic goods and services produced within the domestic territory of a country in an accounting year plus the net factor income from abroad

IMPORTANT CONCEPTS

$$\text{GNP}_{\text{MP}} = \text{GDP}_{\text{MP}} + \text{Net Factor Income from Abroad}$$

$$\begin{aligned} \text{NDP}_{\text{MP}} &= \text{GDP}_{\text{MP}} - \text{Depreciation} \\ &= \text{NNP}_{\text{MP}} - \text{Net Factor Income from Abroad} \end{aligned}$$

$$\begin{aligned} \text{NNP}_{\text{MP}} &= \text{GNP}_{\text{MP}} - \text{Depreciation} \\ &= \text{NDP}_{\text{MP}} + \text{Net Factor Income from abroad} \\ &= \text{GDP}_{\text{MP}} + \text{Net Factor Income from Abroad} - \text{Depreciation} \end{aligned}$$

$GNP_{MP} = GDP_{MP} + \text{Net Factor Income from Abroad}$

Factor Cost = Market Price - Net Indirect Taxes = Market Price - Indirect Taxes + Subsidies

$GNP_{MP} = GDP_{MP} + \text{Net Factor Income from Abroad}$

Market Price = Factor Cost + Net Indirect Taxes = Factor Cost + Indirect Taxes - Subsidies

Gross Domestic Product at Factor Cost (GDP_{FC}) = $GDP_{MP} - \text{Indirect Taxes} + \text{Subsidies}$

Net Domestic Product at Factor Cost (NDPFC) is defined as the total factor incomes earned by the factors of production.

$= NDP_{FC} = NDP_{MP} - \text{Net Indirect Taxes}$

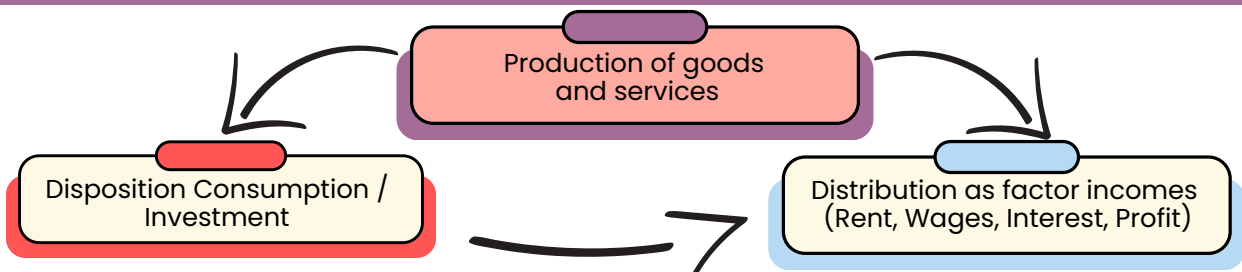
Disposable Personal Income (DI) that is available for their consumption or savings $DI = PI - \text{Personal Income Taxes} - \text{Non Tax Payments}$

Private Income = Factor income from net domestic product accruing to the private sector + Net factor income from abroad + National debt interest + Current transfers from government + Other net transfers from the rest of the world.

Personal income is a measure of the actual current income receipt of persons from all sources.

$PI = NI + \text{income received but not earned} - \text{income earned but not received}$

CIRCULAR FLOW OF INCOME



DATA REQUIREMENTS AND OUTCOMES OF DIFFERENT METHODS OF NATIONAL INCOME CALCULATION

Method	Date required	What is measured
Phase of Output: Value added method (Product Method)	The sum of net values added by all the producing enterprises of the country	Contribution of production units
Phase of income: Income Method	Total factor incomes generated in the production of goods and services	Relative contribution of factor owners
Expenditure Method	Sum of expenditures of the three spending units in the economy, namely, government, consumer households, and production enterprises	Flow of consumption and investment expenditures

THE SYSTEM OF REGIONAL ACCOUNTS IN INDIA

At present, practically all the states and union territories of India compute state income estimates and district level estimates. State Income or Net State Domestic Product (NSDP) is a measure in monetary terms of the volume of all goods and services produced in the state within a given period of time (generally a year) accounted without duplication.

INCOME METHOD

NNP_{FC} or National Income = Compensation of employees + Operating Surplus (rent + interest + profit) + Mixed Income of Self-employed + Net Factor Income from Abroad

PRODUCTION METHOD

Gross value added (GVA_{MP}) = Value of output – Intermediate consumption = (Sales + change in stock) – Intermediate consumption

EXPENDITURE METHOD

GDP_{MP} = Private final consumption expenditure + Government final consumption expenditure + Gross domestic capital formation (Net domestic capital formation + depreciation) + Net export

In agricultural sector, net value added is estimated by the production method, in small scale sector net value added is estimated by the income method and in the construction sector net value added is estimated by the expenditure method.

LIMITATION OF NATIONAL INCOME

- Lack of an agreed definition of national income.
- Accurate distinction between final goods and intermediate goods.
- Issue of transfer payments.

- Services of durable goods.
- Difficulty of incorporating distribution of income.
- Valuation of a new good at constant prices, and valuation of government services.

CHALLENGES

- Inadequacy of data and lack of reliability of available data.
- Presence of non-monetized sector.
- Production for self-consumption.

- Absence of recording of incomes due to illiteracy and ignorance.
- Lack of proper occupational classification and
- Accurate estimation of consumption of fixed capital.

KEYNESIAN THEORY OF DETERMINATION OF NATIONAL INCOME

The classical economists maintained that the economy is self-regulating and is always capable of automatically achieving equilibrium at the 'natural level' of real GDP or output, which is the level of real GDP that is obtained when the economy's resources are fully employed. While circumstances arise from time to time that cause the economy to fall below or to exceed the natural level of real GDP, wage and price flexibility will bring the economy back to the natural level of real GDP.

Keynes argued that markets would not automatically lead to full-employment equilibrium and the resulting natural level of real GDP. The economy could settle in equilibrium at any level of unemployment. Keynesians believe that prices and wages are not so flexible; they are sticky, especially downward.

BASIC CONCEPTS AND FUNCTIONS

AGGREGATE DEMAND FUNCTION

Aggregate demand (AD) is what economists call total planned expenditure. In a simple two-sector economy, the ex-ante aggregate demand (AD) for final goods or aggregate expenditure consists of only two components:

- (i) Ex ante aggregate demand for consumer goods (C), and
- (ii) Ex ante aggregate demand for investment goods (I)



$$AD = C + I$$

THE CONSUMPTION FUNCTION

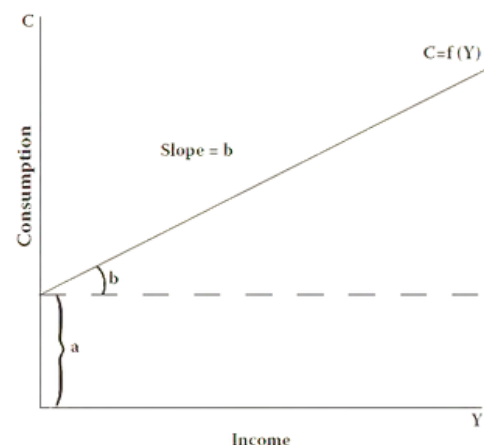
Consumption function expresses the functional relationship between aggregate consumption expenditure and aggregate disposable income, expressed as:



$$C = f(Y)$$

KEYNESIAN CONSUMPTION FUNCTION

The Keynesian assumption is that consumption increases with an increase in disposable income, but that the increase in consumption will be less than the increase in disposable income ($b < 1$). i.e. $0 < b < 1$. This fundamental relationship between income and consumption plays a crucial role in the Keynesian theory of income determination.



MARGINAL PROPENSITY TO CONSUME (MPC)

The concept of MPC describes the relationship between change in consumption (ΔC) and the change in income (ΔY). The value of the increment to consumer expenditure per unit of increment to income is termed the Marginal Propensity to Consume (MPC).

AVERAGE PROPENSITY TO CONSUME (APC)

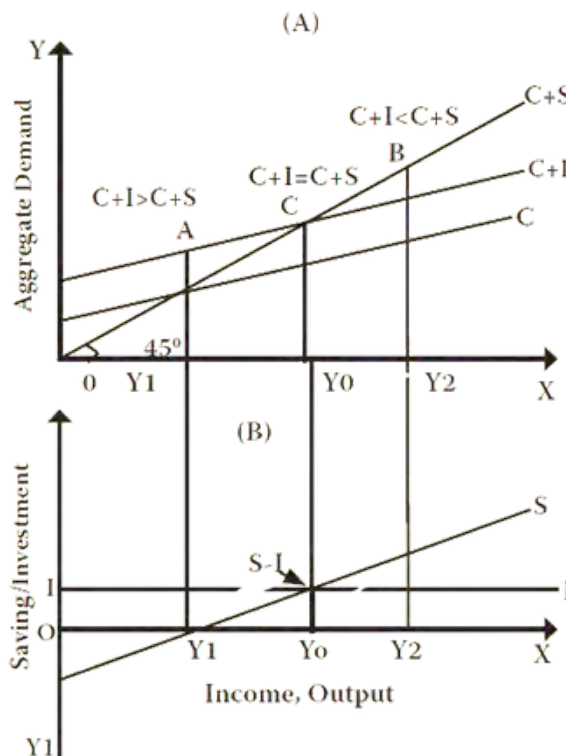
Just as marginal propensity to consume, the average propensity to consume is a ratio of consumption defining income consumption relationship. The ratio of total consumption to total income is known as the average propensity to consume (APC).

TWO SECTOR MODEL

In the two-sector economy aggregate demand (AD) or aggregate expenditure consists of only two components: aggregate demand for consumer goods and aggregate demand for investment goods, I being determined exogenously and constant in the short run.

Consumption function expresses the functional relationship between aggregate consumption expenditure and aggregate disposable income, expressed as $C = f(Y)$. The specific form consumption function, proposed by Keynes $C = a + bY$

The value of the increment to consumer expenditure per unit of increment to income (b) is termed the Marginal Propensity to Consume (MPC).

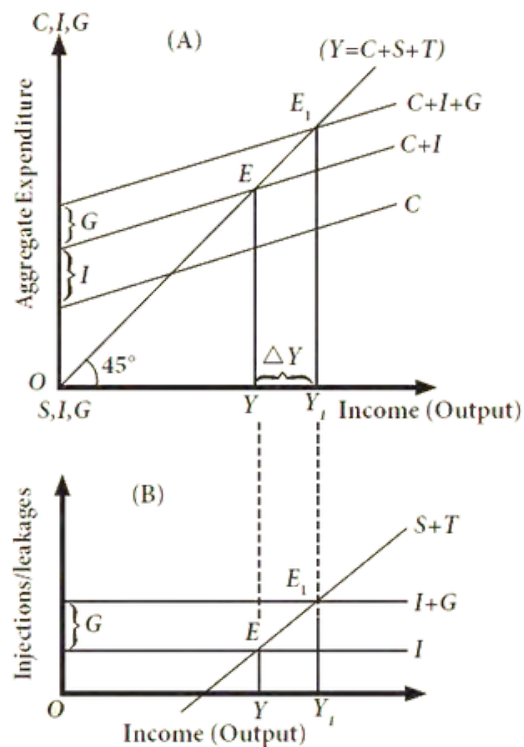
DETERMINATION OF EQUILIBRIUM INCOME: TWO SECTOR MODEL

THREE SECTOR ECONOMY

Aggregate demand in the three-sector model of closed economy (neglecting foreign trade) consists of three components namely, household consumption (C), desired business investment demand (I) and the government sector's demand for goods and services (G).

The government sector imposes taxes on households and business sector, effects transfer payments to household sector and subsidy payments to the business sector, purchases goods and services and borrows from financial markets.

In equilibrium, it is also true that the $(S + T)$ schedule intersects the $(I + G)$ horizontal Schedule.



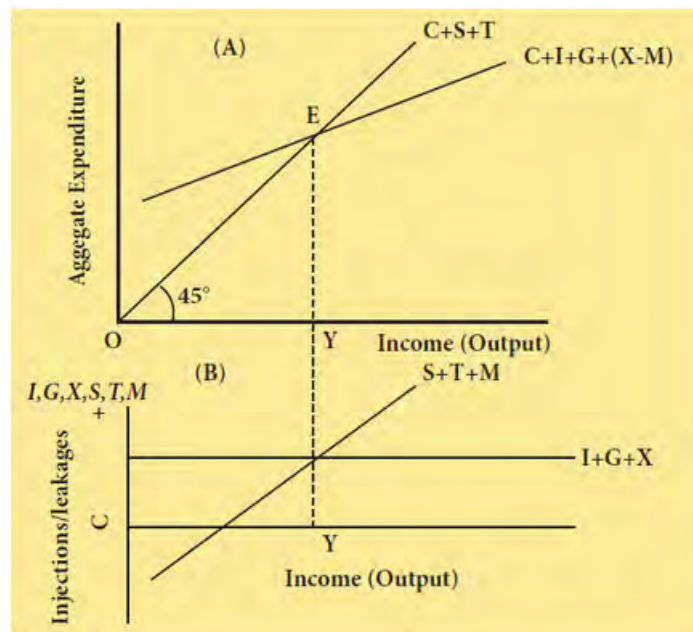
FOUR SECTOR MODEL

The four-sector model includes all four macroeconomic sectors, the household sector, the business sector, the government sector, and the foreign sector and in equilibrium, we have $Y = C + I + G + (X - M)$

Imports are subtracted from exports to derive net exports, which is the foreign sector's contribution to aggregate expenditures. If net exports are positive ($X > M$), there is net injection and national income increases. Conversely, if $X < M$, there is net withdrawal and national income decreases.

The domestic economy trades goods with the foreign sector through exports and imports.

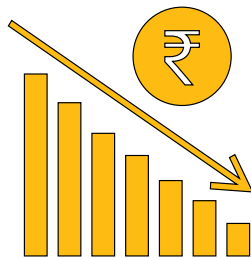
DETERMINATION OF EQUILIBRIUM INCOME: FOUR SECTOR MODEL



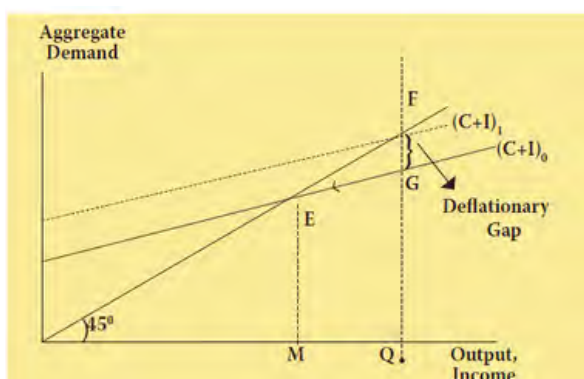
DEFLATIONARY & INFLATIONARY GAP

DEFLATIONARY GAP

If the aggregate demand is for an amount of output less than the full employment level of output, then we say there is deficient demand. Deficient demand gives rise to a 'deflationary gap' or 'recessionary gap'



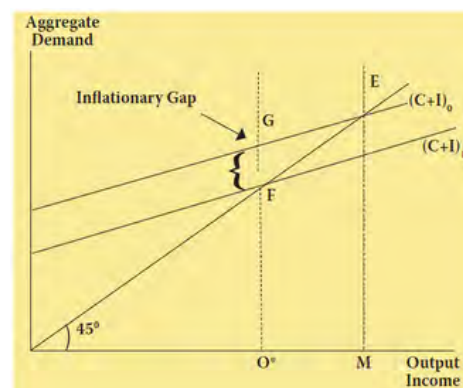
DEFICIENT DEMAND – DEFLATIONARY GAP



INFLATIONARY GAP

- If the aggregate demand is for an amount of output greater than the full employment level of output, then we say there is excess demand. Excess demand gives rise to 'inflationary gap' which is the amount by which actual aggregate demand exceeds the level of aggregate demand required to establish the full employment equilibrium.
- This is the sort of gap that tends to occur during a business-cycle expansion and sets in motion forces that will cause demand pull inflation.

EXCESS DEMAND – INFLATIONARY GAP



PUBLIC FINANCE

1. PUBLIC FINANCE

- Since the 1930s, the traditional functions of the state have been supplemented with the economic functions (also called the fiscal functions or the public finance function)
- Richard Musgrave (1959) introduced the three branch taxonomy of the role of government in a market economy namely, resource allocation, income redistribution and macroeconomic stabilisation

2. GOVERNMENT INTERVENTION

Government intervention to direct the functioning of the economy is based on the belief that the objective of the economic system and the role of government is to improve the wellbeing of individuals and households.

3. ALLOCATION FUNCTION

The allocation responsibility of the governments involves appropriate corrective action when private markets fail to provide the right and desirable combination of goods and services

4. DISTRIBUTION FUNCTION

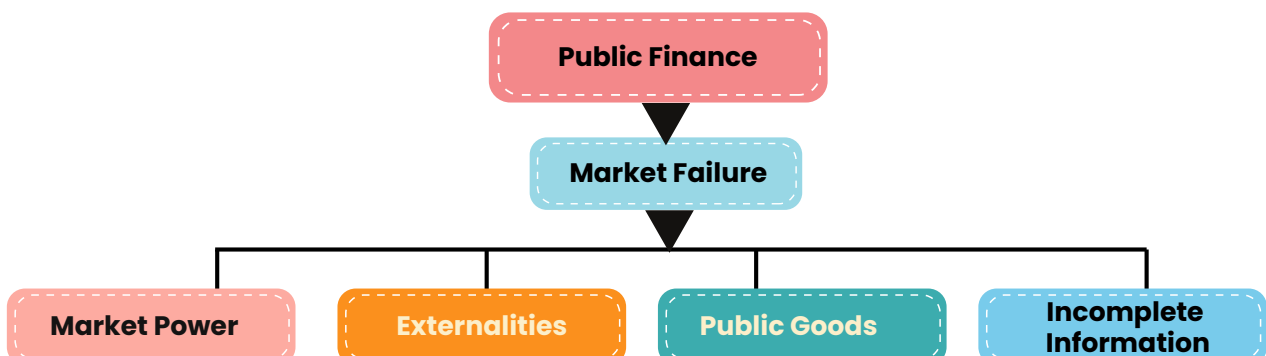
The distribution function aims at redistribution of income so as to ensure equity and fairness to promote the wellbeing of all sections of people and is achieved through taxation public expenditure, regulation and preferential treatment of target populations.

5. STABILISATION FUNCTION

The stabilisation function is concerned with the performance of the aggregate economy in terms of labour employment and capital utilization, overall output and income, general price levels, economic growth and balance of international payments.

6. MARKET FAILURES

Market failures, which hold back the efficient allocation of resources, occur mainly due to imperfect competition, presence of monopoly power, collectively consumed public goods, externalities, factor immobility, imperfect information, and inequalities in the distribution of income and wealth.



MARKET POWER

Market power or monopoly power is the ability of a firm to profitably raise the market price of a good or service over its marginal cost. Firms that have market power are price makers and therefore, can charge a price that gives them positive economic profits.

1. EXTERNALITIES

Externalities, also referred to as 'spillover effects', 'neighbourhood effects' 'third-party effects' or 'side-effects', occur when the actions of either consumers or producers result in costs or benefits that do not reflect as part of the market therefore are external to the market.

2. TYPES OF EXTERNALITIES

- Negative production externalities
- Positive Production externalities
- Negative consumption externalities
- Positive consumption externalities

3. CAUSES OF EXTERNALITIES

Externalities cause market inefficiencies because they hinder the ability of market prices to convey accurate information about how much to produce and how much to buy. Since externalities are not reflected in market prices, they can be a source of economic inefficiency.

4. PUBLIC GOODS

Public goods do not conform to the settings of market exchange and left to the market, they will not be produced at all or will be underproduced. This is because the price becomes zero.

5. PRIVATE GOODS

Private goods are 'rivalrous' 'and excludable' and less likely to have the free rider problem. Additional resource costs are involved for providing to another individual.

6. QUASI PUBLIC GOODS

The quasi-public goods or services, also called a near public good (for e.g. education, health services) possess nearly all of the qualities of the private goods and some of the benefits of public good.

7. COMMON ACCESS RESOURCES

Common access resources or common pool resources are a special class of impure public goods which are non-excludable as people cannot be excluded from using them. These are rival in nature and their consumption lessens the benefits available for others. Examples of common access resources are fisheries, forests, backwater, etc.

8. TRAGEDY OF THE COMMONS

'The Tragedy of the Commons' (1968). Economists use the term to describe the problem which occurs when rivalrous but non excludable goods are overused to the disadvantage of the entire world.

MARKET POWER

GLOBAL PUBLIC GOODS

Global public goods are those public goods with benefits/costs that potentially extend to everyone in the world. These goods have widespread impact on different countries and regions, population groups and generations throughout the entire globe.

THE FREE RIDER PROBLEM

A free rider is a person who benefits from something without expending effort or paying for it. In other words, free riders are those who utilize goods without paying for their use. Example is Wikipedia

INCOMPLETE INFORMATION

Complete information is an important element of competitive market. Perfect information implies that both buyers and sellers have complete information about anything that may influence their decision making.

ADVERSE SELECTION

Adverse selection generally refers to any situation in which one party to a contract or negotiation, such as a seller, possesses information relevant to the contract or negotiation that the corresponding party, such as a buyer, does not have; this asymmetric information leads the party lacking relevant knowledge to make suboptimal decisions and suffer adverse effects.

ASYMMETRIC INFORMATION

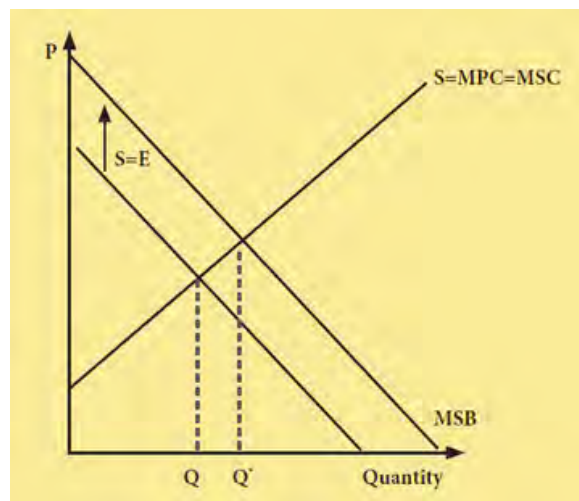
Asymmetric information occurs when there is an imbalance in information between the buyer and the seller i.e., when the buyer knows more than the seller, or the seller knows more than the buyer. This can distort choices.

MORAL HAZARD

Moral hazard is opportunism characterized by an informed person's taking advantage of a less-informed person through an unobserved action.

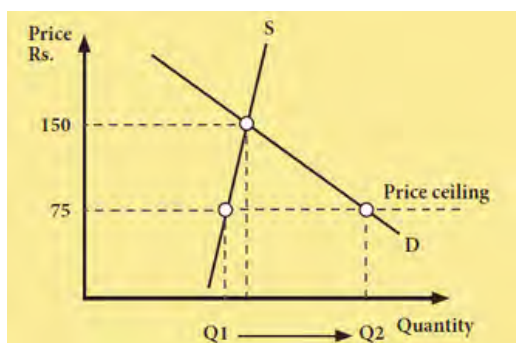
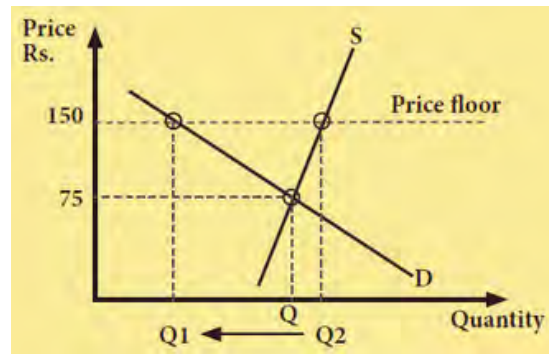
EFFECT OF SUBSIDY ON OUTPUT

- Subsidy is market-based policy and involves the government paying part of the cost to the firms in order to promote the production of goods having positive externalities.
- Two of the most common types of individual subsidies are welfare payments and unemployment benefits.



MARKET OUTCOME OF MINIMUM SUPPORT PRICE

Government usually intervenes in many primary markets which are subject to extreme as well as unpredictable fluctuations in price. For example, in India, in the case of many crops the government has initiated the Minimum Support Price (MSP) programme as well as procurement by government agencies at the set support prices.



MARKET OUTCOME OF PRICE CEILING

Price ceilings prevent a price from rising above a certain level. When a price ceiling is set below the equilibrium price, quantity demanded will exceed quantity supplied, and excess demand or shortages will result. For example: maximum prices of food grains and essential items are set by government during times of scarcity. A price ceiling which is set below the prevailing market clearing price will generate excess demand over supply.

FISCAL POLICY

Fiscal policy is in the nature of a demand-side policy.

Fiscal policy involves the use of government spending, taxation and borrowing to influence both the pattern of economic activity and level of growth of aggregate demand, output, and employment.

The significance of fiscal policy as a strategy for achieving certain socio-economic objectives was not recognised or widely acknowledged before 1930 due to the faith in the limited role of government advocated by the then prevailing laissez-faire approach.

Objective of Fiscal Policy

maintenance of price stability

achievement and maintenance of full employment,

acceleration of the rate of economic development, and

equitable distribution of income and wealth.

TOOLS OF FISCAL POLICY

The tools of fiscal policy are taxes, government expenditure, public debt and the government budget.

EXPANSIONARY FISCAL POLICY

Expansionary fiscal policy is designed to stimulate the economy during the contractionary phase of a business cycle and is accomplished by increasing aggregate expenditures and aggregate demand through an increase in all types of government spending and / or a decrease in taxes.

CONTRACTIONARY FISCAL POLICY

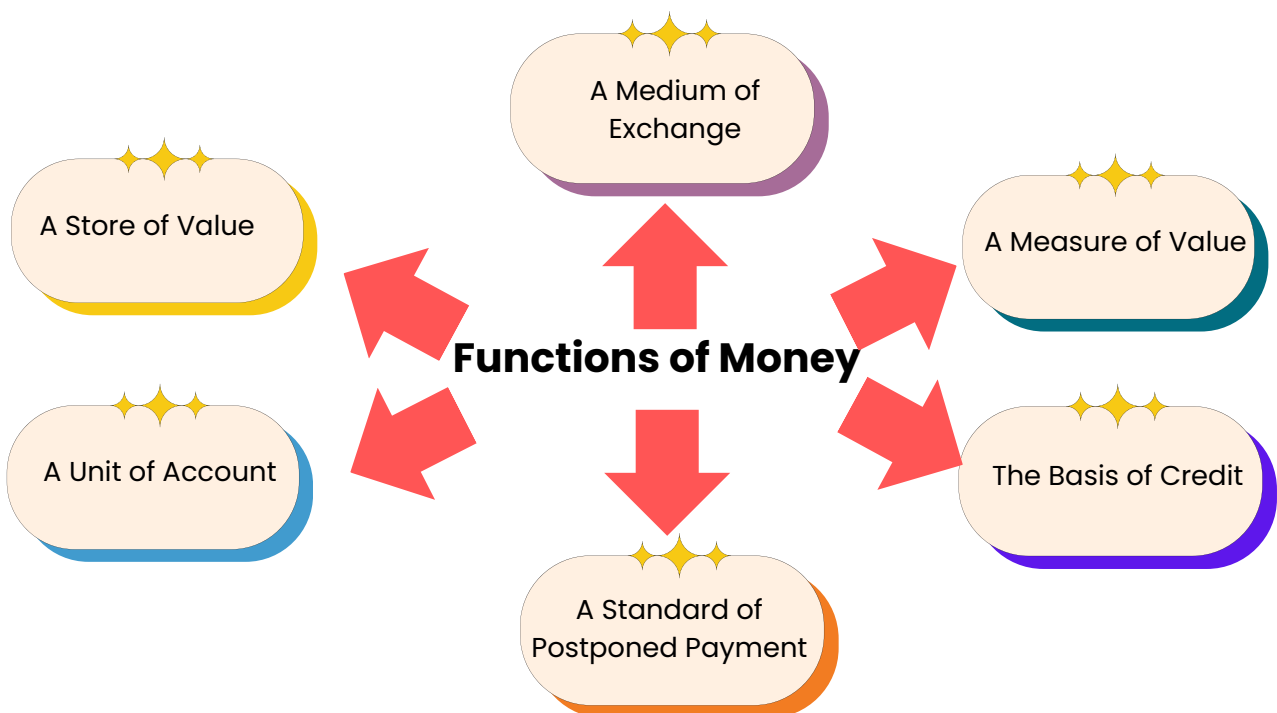
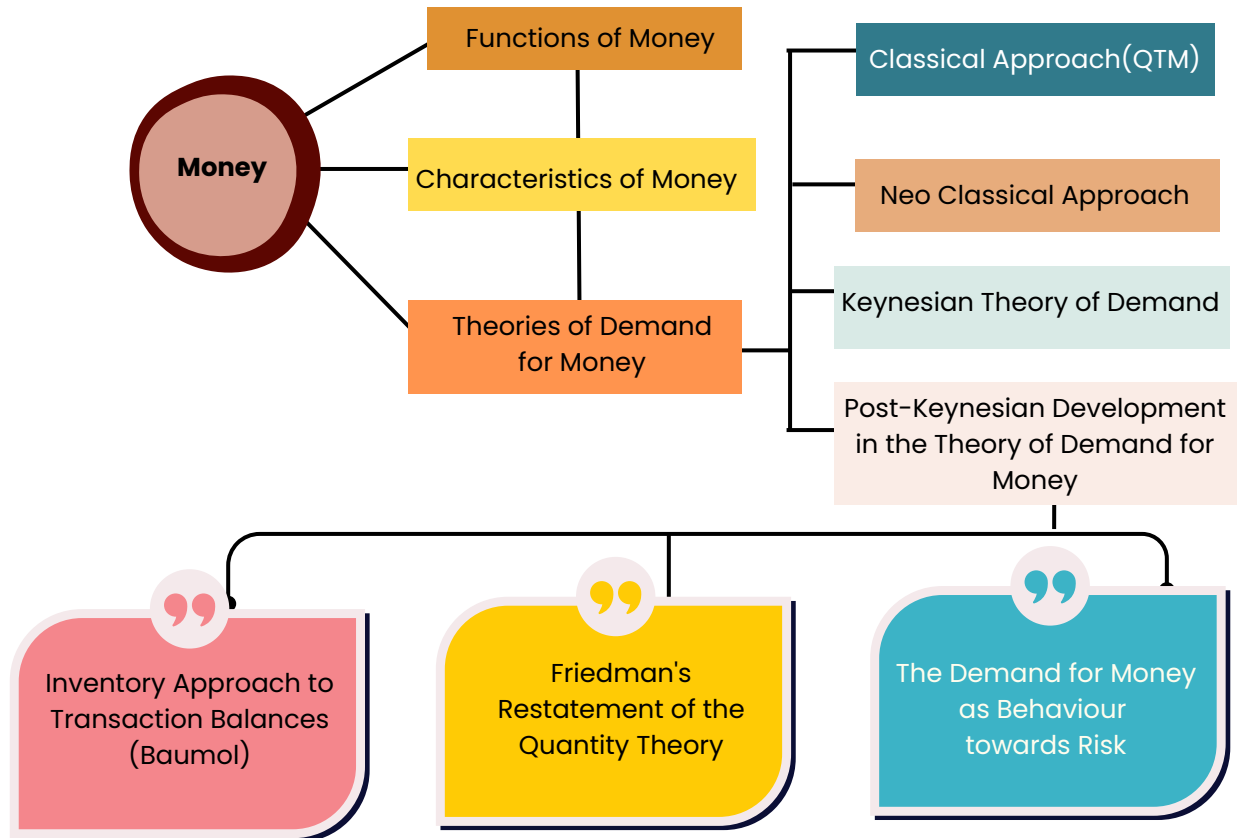
Contractionary fiscal policy is designed to restrain the levels of economic activity of the economy during an inflationary phase by decreasing the aggregate expenditures and aggregate demand through a decrease in all types of government spending and/ or an increase in taxes.

PUMP PRIMING

Pump priming involves a one-shot injection of government expenditure into a depressed economy with the aim of boosting business confidence and encouraging larger private investment. It is a temporary fiscal stimulus in order to set off the multiplier process.

THE CONCEPT OF MONEY DEMAND: IMPORTANT THEORIES

Money refers to assets which are commonly used and accepted as a means of payment or as a medium of exchange or of transferring purchasing power.



POST- KEYNESIAN DEVELOPMENT IN THE THEORY OF DEMAND FOR MONEY

- Inventory Approach to Transaction Balances (Baumol)
- Baumol (1952) and Tobin (1956) developed a deterministic theory of transaction demand for 'real cash balance', known as Inventory Theoretic Approach, in which money is essentially viewed as an inventory held for transaction purposes.
- People hold an optimum combination of bonds and cash balance, i.e., an amount that minimises the opportunity cost.
- The optimal average money holding is: a positive function of income Y , a positive function of the price level P , a positive function of transactions costs c , and a negative function of the nominal interest rate i .

FRIEDMAN'S RESTATEMENT OF THE QUANTITY THEORY

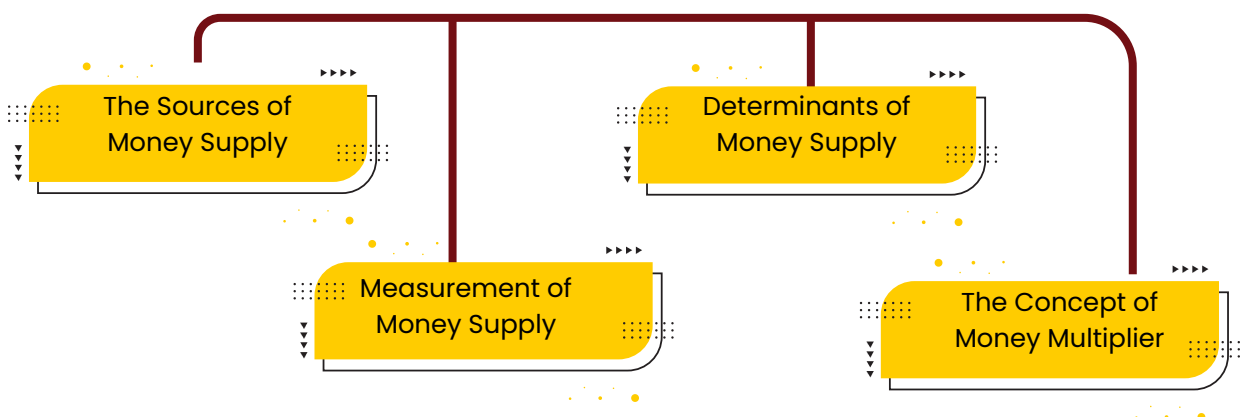
- Milton Friedman (1956) extending Keynes' speculative money demand within the framework of asset price theory holds that demand for money is affected by the same factors as demand for any other asset, namely, permanent income and relative returns on assets
- The nominal demand for money is positively related to the price level, P ; rises if bonds and stock returns, r_b and r_e , respectively decline and vice versa; is influenced by inflation; and is a function of total wealth

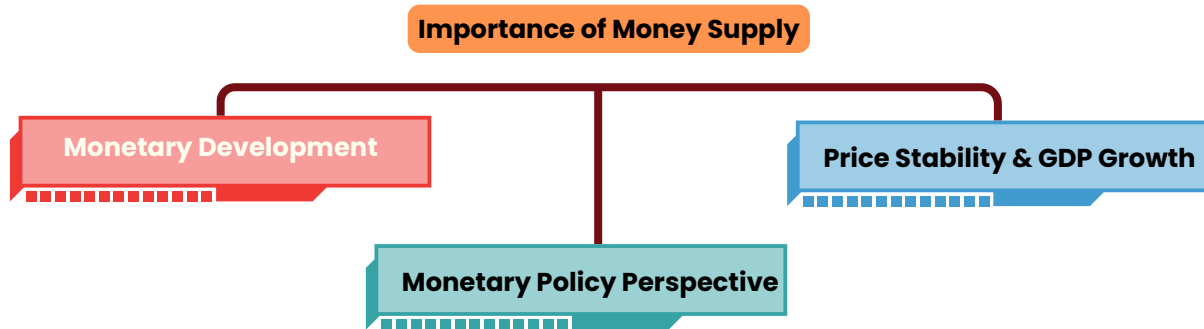
THE DEMAND FOR MONEY AS BEHAVIOUR TOWARD RISK

- The Demand for Money as Behaviour toward as 'aversion to risk' propounded by Tobin states that money is a safe asset but an investor will be willing to exercise a trade-off and sacrifice to some extent the higher return from bonds for a reduction in risk
- According to Tobin, rational behaviour induces individuals to hold an optimally structured wealth portfolio which is comprised of both bonds and money and the demand for money as a store of wealth depends negatively on the interest rate.

CONCEPT OF MONEY SUPPLY

The measures of money supply vary from country to country, from time to time and from purpose to purpose.

The Concept of Money Supply



SOURCES OF MONEY SUPPLY

- The central banks of all countries are empowered to issue currency and therefore, the central bank is the primary source of money supply in all countries. In effect, high powered money is the source of all other forms of money.
- The supply responses of the commercial banking system of the country to the changes in policy variables initiated by the central bank to influence the total money supply in the economy. In India, RBI is the Central Bank.

MEASUREMENT OF MONEY SUPPLY

- The measures of money supply vary from country to country, from time to time and from purpose to purpose.
- Measurement of money supply is essential as it enables a framework to evaluate whether the stock of money in the economy is consistent with the standards for price stability, to understand the nature of deviations from this standard and to study the causes of money growth.
- In India, RBI has been publishing data on four alternative measures of money supply denoted by M1, M2, M3, M4 besides the reserve money.

M1 =	Currency and coins with the people + demand deposits of banks (Current and Saving accounts) + other deposits with the RBI.
M2 =	M1 + savings deposits with post office savings banks.
M3 =	M1 + net time deposits with the banking system
M4 =	M3 + total deposits with the Post Office Savings Organisation (excluding National Savings Certificates).

NEW MONETARY AGGREGATE

Based on the recommendations of the Working Group on Money (1998), the RBI has started publishing a set of four new monetary aggregates on the basis of the balance sheet of the banking sector in conformity with the norms of progressive liquidity. The new monetary aggregates are

Reserve money, also known as central bank money, base money, or high-powered money, determines the level of liquidity and price level in the economy.

Reserve Money=	Currency in circulation + Bankers' deposits with the RBI + Other deposits with the RBI = Net RBI credit to the Government + RBI credit to the Commercial sector + RBI's Claims on banks + RBI's net foreign assets + Government's Currency liabilities to the public – RBI's net non-monetary Liabilities
NM1=	Currency with the public + Demand deposits with the banking system + 'Other' deposits with the RBI.
NM2=	NM1 + Short-term time deposits of residents (including and up to contractual maturity of one year).
NM3=	NM2 + Long-term time deposits of residents + Call/Term funding from financial institutions

LIQUIDITY AGGREGATES	
L1	NM3 + All deposits with the post office savings banks (excluding National Savings Certificates).
L2	L1 + Term deposits with term lending institutions and refinancing institutions (FIs) + Term borrowing by FIs + Certificates of deposit issued by FI's.
L3	L2 + Public deposits of non-banking financial companies

THE CONCEPT OF MONEY MULTIPLIER

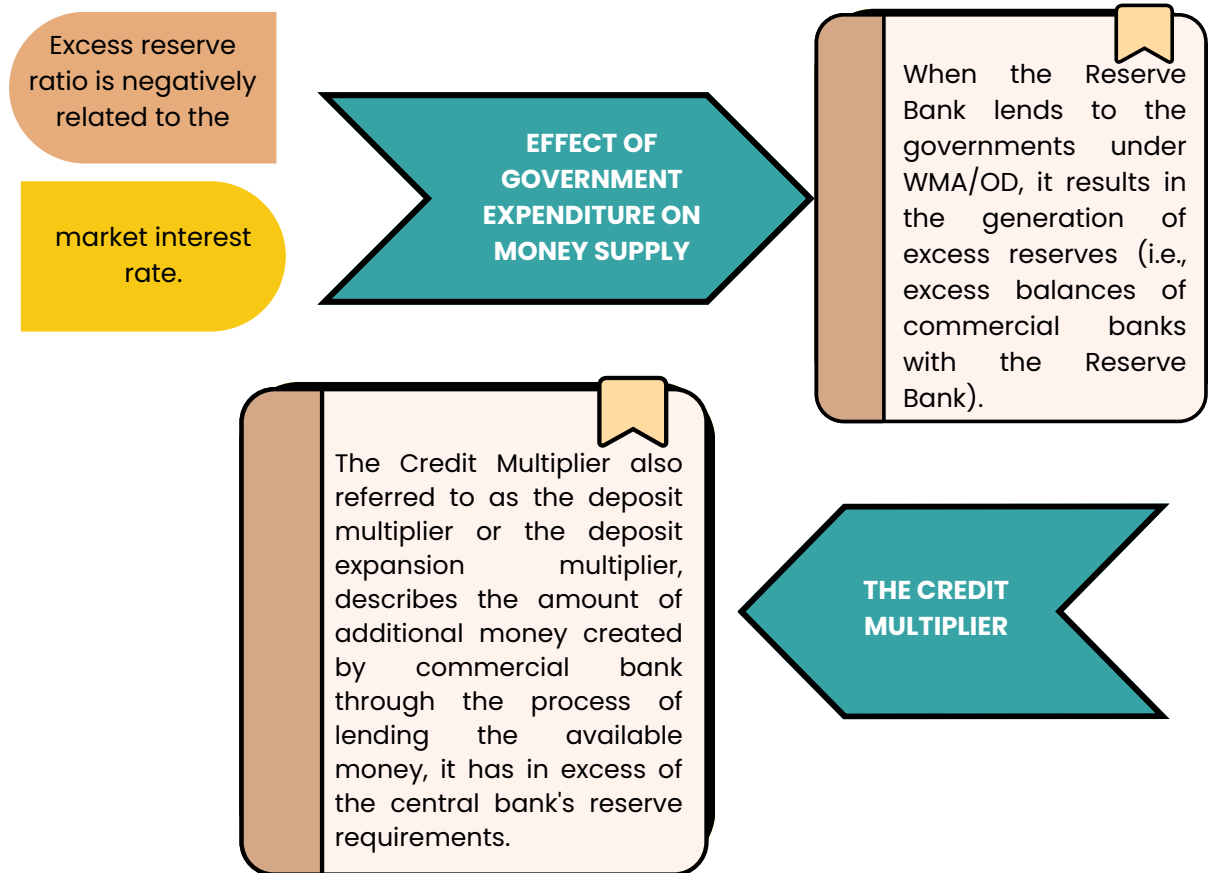
- The money supply is defined as $M = m \times MB$
- Where M is the money supply, m is money multiplier and MB is the monetary base or high-powered money.
- Money Multiplier(m) = (Money Supply) / (Monetary Base)

The additional units of high powered money that goes into 'excess reserves' of the commercial banks do not lead to any additional loans and therefore, these excess reserve do not lead to the creation of deposits.

The money multiplier approach to money supply propounded by Milton Friedman and Anna Schwartz, (1963) considers three factors as immediate determinants of money supply

- the stock of high-powered money (H)
- the ratio of deposit to reserve, $e = \{R/D\}$ and
- the ratio of deposit to currency, $c = \{C/D\}$

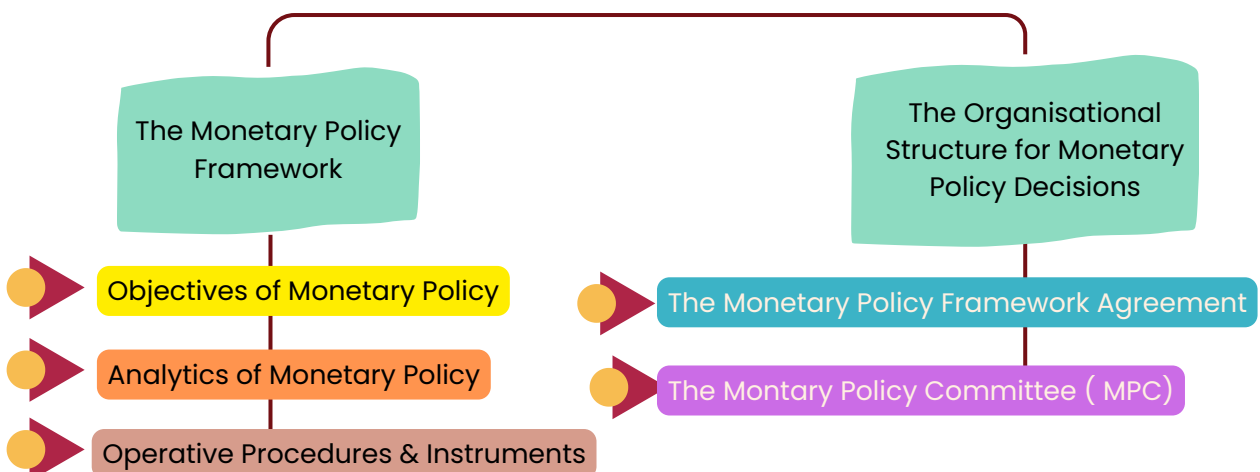
When the required ratio falls, there will be multiple expansions for demand deposits.

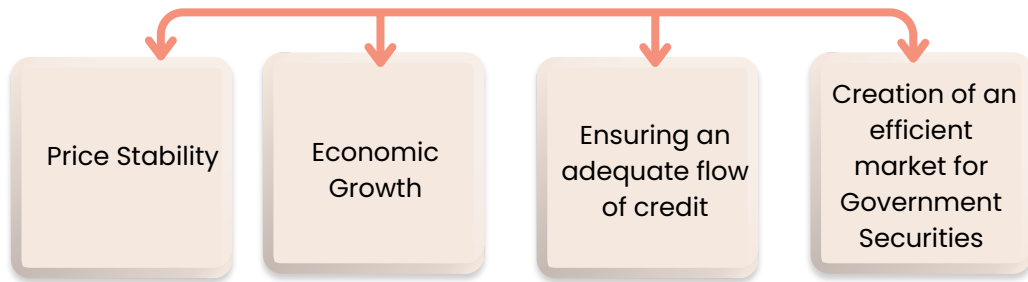
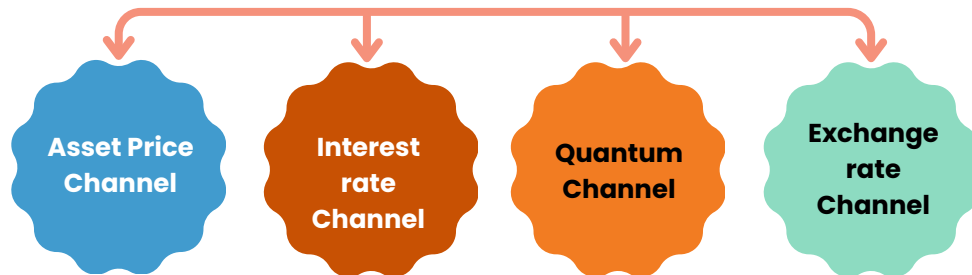


MONETARY POLICY

Monetary policy refers to the use of monetary policy instruments which are at the disposal of the central bank to regulate the availability, cost and use of money and credit so as to promote economic growth, price stability, optimum levels of output and employment, balance of payments equilibrium, stable currency or any other goal of government's economic policy.

MONETARY POLICY



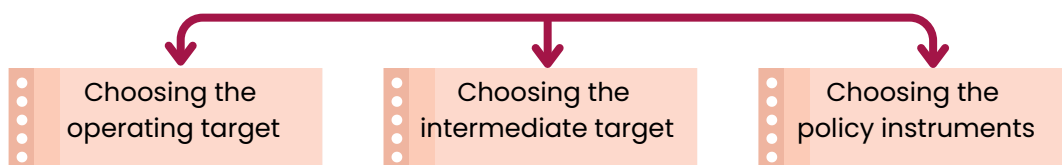
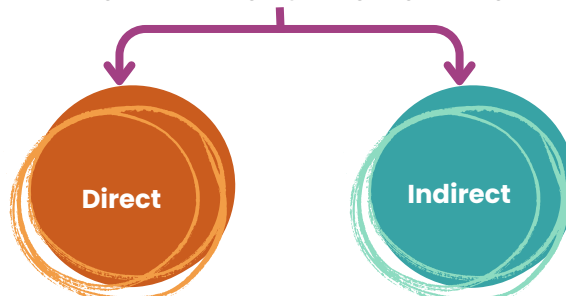
OBJECTIVES OF MONETARY POLICY**ANALYTICS OF MONETARY POLICY**

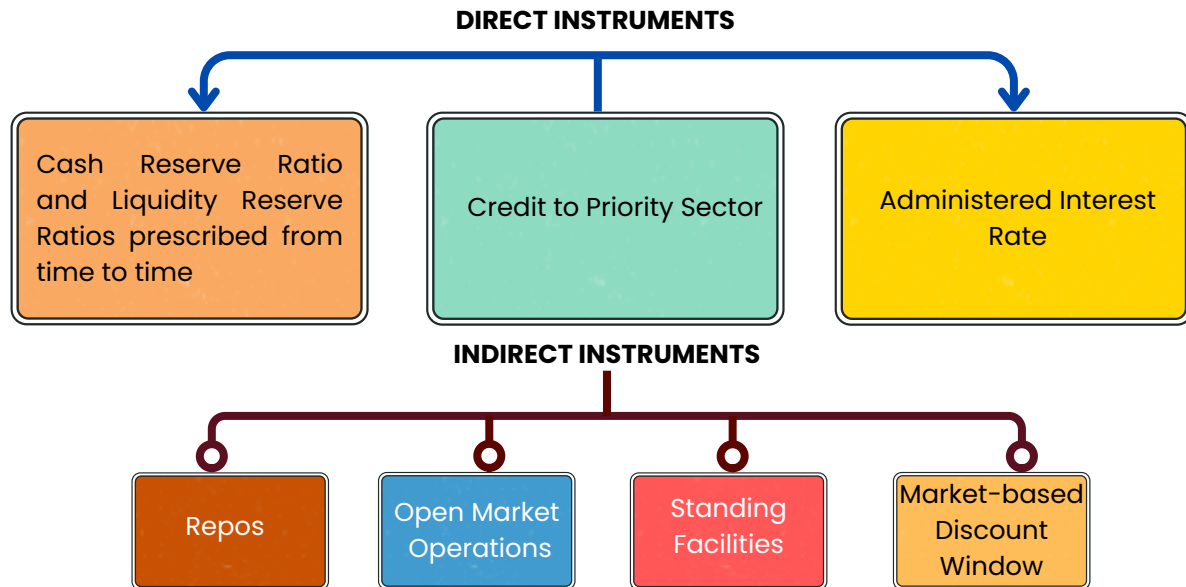
A contractionary monetary policy-induced increase in interest rates, increases the cost of capital and the real cost of borrowing for firms and households who respond by cutting back on their investment and purchase expenditures respectively

The exchange rate channel works through expenditure switching between domestic and foreign goods on account of appreciation/ depreciation of the domestic currency with its impact on net exports and consequently on domestic output and employment.

Two distinct credit channels- the bank lending channel and the balance sheet channel operate by altering access of firm and household to bank credit and by the effect of monetary policy on the firm's balance sheet respectively.

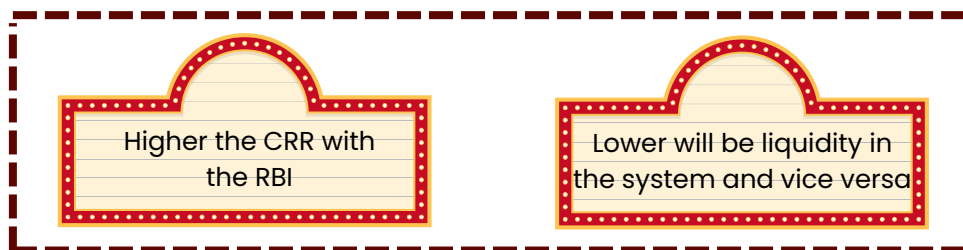
Asset prices generate important wealth effects that impact, through spending, output and employment.

OPERATING FRAMEWORK**MONETARY POLICY INSTRUMENTS**



CASH RESERVE RATIO

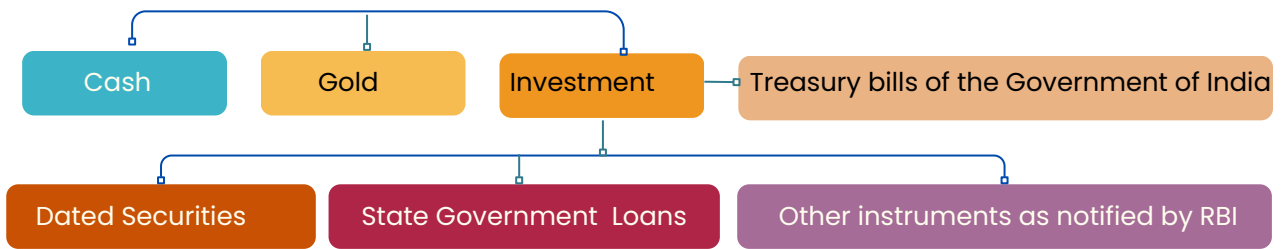
The Cash Reserve Ratio (CRR) refers to the fraction of the total net demand and time liabilities (NDTL) of a scheduled commercial bank in India, which it should maintain as cash deposit with the Reserve Bank irrespective of its size or financial position



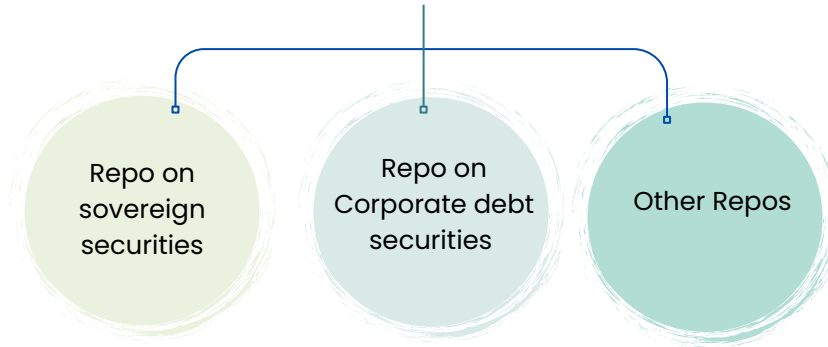
STATUTORY LIQUIDITY RATIO

- The Statutory Liquidity Ratio (SLR) is what the scheduled commercial banks in India are required to maintain as a stipulated percentage of their total Demand and Time Liabilities (DTL) / Net DTL (NDTL) in Cash, Gold or approved investments in securities.
- The SLR is also a powerful tool for controlling liquidity in the domestic market by means of manipulating bank credit. Changes in the SLR chiefly influence the availability of resources in the banking system for lending.

STATUTORY LIQUIDITY RATIO



TYPES OF REPO MARKET



Policy Rate

- In India, the fixed repo rate quoted for sovereign securities in the overnight segment of Liquidity Adjustment Facility (LAF) is considered as the 'policy rate'.
- Repo or repurchase option is a collateralised lending because banks borrow money from Reserve bank of India to fulfill their short term monetary requirements by selling securities to RBI with an explicit agreement to repurchase the same at predetermined date and at a fixed rate. The rate charged by RBI for this transaction is called the 'repo rate'.
- Reverse Repo is defined as an instrument for lending funds by purchasing securities with an agreement to resell the securities on a mutually agreed future date at an agreed price which includes interest for the funds lent.



The Liquidity Adjustment (LAF)

The Liquidity Adjustment Facility (LAF) is a facility extended by the Reserve Bank of India to the scheduled commercial banks (excluding RRBs) and primary dealers to avail of liquidity in case of requirement (or park excess funds with the RBI in case of excess liquidity) on an overnight basis against the collateral of government securities including state government securities.

Monetary Policy Committee

The Monetary Policy Committee (MPC) consisting of six members shall determine the policy rate to achieve the inflation target through debate and majority vote by a panel of experts.

- The Monetary Policy Framework Agreement is an agreement reached between the Government of India and the Reserve Bank of India (RBI) on the maximum tolerable inflation rate as 4 percent Consumer Price Index (CPI) inflation with a deviation of 2 percent.
- Choice of a monetary policy action is rather complicated in view of the surrounding uncertainties and the need for exercising complex judgment to balance growth and inflation concerns. Additional complexities arise in the case of an emerging market like India.

INTERNATIONAL TRADE

International trade is the exchange of goods and services as well as resources between countries and involves greater complexity compared to internal trade

IMPORTANT THEORIES OF INTERNATIONAL THEORIES

The Theory of Absolute Advantage: Adam Smith

According to Adam Smith's Absolute Cost Advantage theory, a country will specialise in the production and export of a commodity in which it has an absolute cost advantage.

The Mercantilists View of International Trade

Mercantilism advocated maximising exports in order to bring in more precious metals and minimising imports through the state imposing very high tariffs on foreign goods

The Theory of Absolute Advantage: Adam Smith

Ricardo's theory of comparative advantage states that a nation should specialise in the production and export of the commodity in which its absolute disadvantage is smaller (this is the commodity of its comparative advantage) and import the commodity in which its absolute disadvantage is greater (this is the commodity of its comparative disadvantage).

The Heckscher-Ohlin Theory of Trade

The Heckscher-Ohlin theory of trade, also referred to as Factor-Endowment Theory of Trade or Modern Theory of Trade, states that comparative advantage in cost of production is explained exclusively by the differences in factor endowments.

Factor-Price Equalisation Theorem

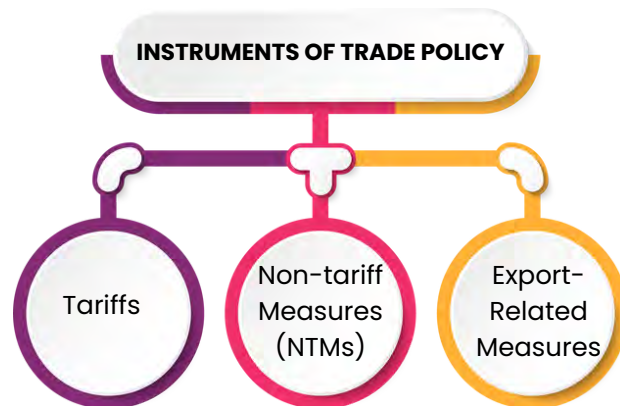
The Factor-Price Equalisation Theorem states that international trade equalises the factor prices between the trading nations. Therefore, with free trade, wages and returns on capital will converge across the countries

New Trade Theory

- New Trade Theory is the latest entrant to explain the rising proportion of world trade in the developed world and bigger developing economies (such as BRICS) which trade in similar products. These countries constitute more than 50% of world trade. According to this theory, two key concepts
- Economies of Scale and Network effects, affects international trade in a major way.

THE INSTRUMENTS OF TRADE POLICY

Trade policy encompasses all instruments that governments may use to promote or restrict imports and exports



TARIFF

Tariff, also known as customs duty is defined as a financial charge in the form of a tax, imposed at the border on goods going from one customs territory to another. Tariffs are the most visible and universally used trade measures.

FORMS OF IMPORT TARIFFS

SPECIFIC TARIFF

A specific tariff is an import duty that assigns a fixed monetary tax per physical unit of the goods imported, whereas an ad valorem tariff is levied as a constant percentage of the monetary value of one unit of the imported good.

AD VALOREM TARIFF

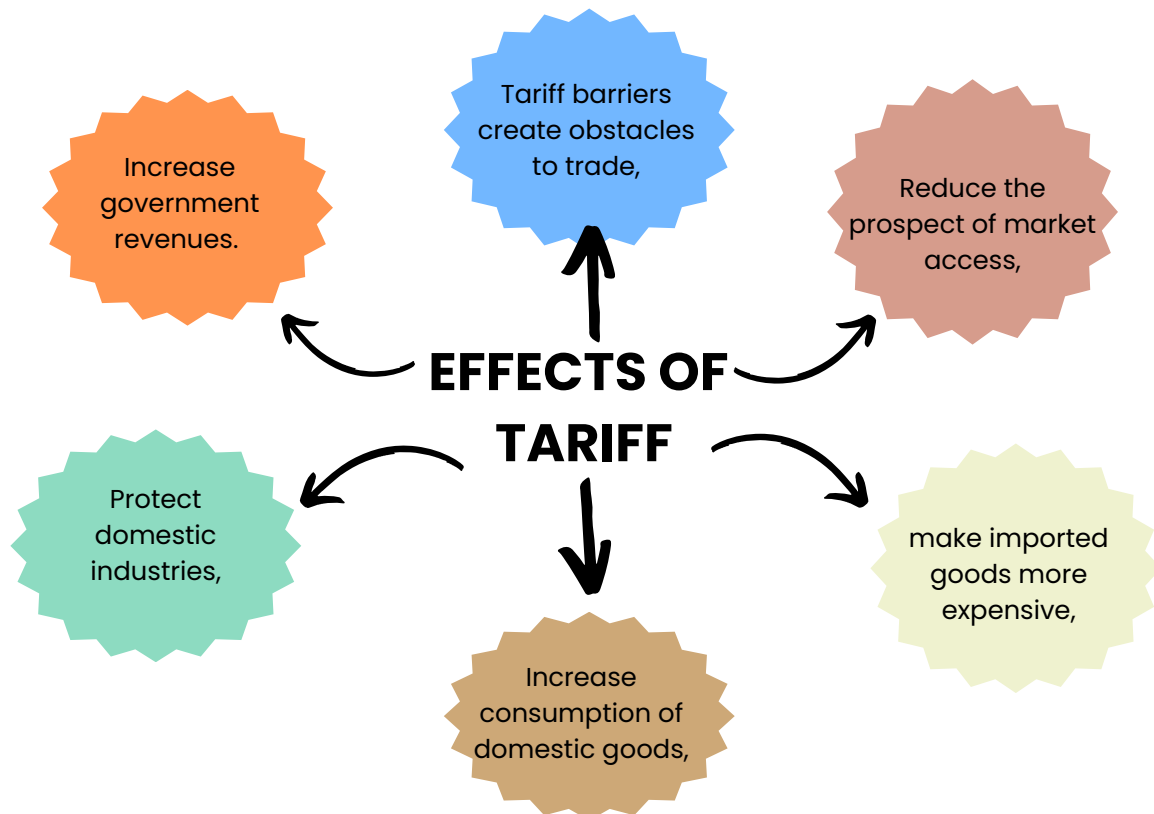
An ad valorem tariff is levied as a constant percentage of the monetary value of one unit of the imported good

ANTI-DUMPING DUTIES

- Dumping occurs when manufacturers sell goods in a foreign country below the sales prices in their domestic market or below their full average cost of the product. It hurts domestic producers
- Anti-dumping measures are additional import duties so as to offset the foreign firm's unfair price advantage.

COUNTERVAILING DUTIES

Countervailing duties are tariffs to offset the artificially low prices charged by exporters, who enjoy export subsidies and tax concessions offered by the governments in their home country.

**NON-TARIFF MEASURES**

Non-tariff measures (NTMs) are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded or prices or both

CATEGORY OF NON-TARIFF MEASURES**TECHNICAL MEASURES**

- Sanitary and Phytosanitary (SPS) measures: applied to protect human, animal or plant life from risks, arising from addition, pests, contaminants, toxins or disease causing organisms. •
- Technical Barriers to trade specifying details such as size, shape, design, labelling/marketing, etc



NON-TECHNICAL MEASURES

Non-technical measures relate to trade requirements; for example; shipping requirements, custom formalities, trade rules, taxation policies, etc.

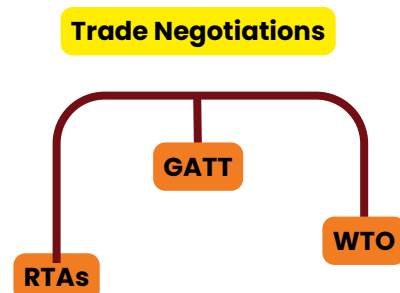
- Import Quotas: Restrictions on physical amount of imported goods
- Price Control Measures: Imposing taxes on charges
- Non Automatic Licensing and Prohibitions: limiting or prohibiting certain types of import
- Financial Measures: Regulating access to and cost of foreign exchange.
- Government Procurement Policies: Govt. may lay down policies w.r.t procurements.
- Trade-Related Investment Measures: May include rules on local content requirements of production
- Embargos: Total ban on import or export of some commodity to a particular country or region for some or indefinite period.

EXPORT RELATED MEASURES

- Ban of Export: Exports of certain items may be banned during shortages.
- Export Taxes: An export tax is a tax collected on exported goods and may be either specific or ad valorem and an export subsidy includes financial contribution to domestic producers in the form of grants, loans, equity infusions also usually provide etc. or give some form of income or price support. Both distort trade.
- Export subsidies and Incentives: Given by government to boost exports.
- Voluntary Export-Restraints: Voluntary Export Restraints (VERs) refer to a type of informal quota administered by an exporting country voluntarily restraining the quantity of goods that can be exported out of a country during a specified period of time, imposed based on negotiations to appease the importing country and to avoid the effects of possible trade restraints.

TRADE NEGOTIATIONS

International trade negotiations, especially the ones aimed at formulation of international trade rules, are complex interactive processes engaged in by countries having competing objectives.



Major Types of Agreements, in International Trade

- Unilateral trade agreements,
- Bilateral agreements,
- Regional preferential trade agreements,
- Trading bloc,
- Free-trade area,
- Customs union,
- Common market and economic and monetary union.

GATT

- The General Agreement on Tariffs and Trade (GATT) provided the rules for much of world trade for 47 years from 1948 to 1994.
- Eight multilateral negotiations known as trade rounds held under the GATT auspices.
- The 8th of the Uruguay Round of 1986-94 was last under GATT and culminated in the birth of WTO.

WTO

- The eighth of the Uruguay Round of 1986-94, was the last and most consequential of all rounds and culminated in the birth of WTO and a new set of agreements replacing the General Agreement on Tariffs and Trade (GATT).

The WTO does its functions by acting as a forum for trade negotiations among member governments, administering trade agreements, reviewing national trade policies, cooperating with other international organisations and assisting developing countries in trade policy issues through technical assistance and training programmes.

The principal objective of the WTO

To facilitate the flow of international trade smoothly, freely, fairly and predictably.

The WTO Activities

are supported by the Secretariat located in Geneva, headed by a Director General. It has a three-tier system of decision-making. The top level decision-making body is the Ministerial Conference, followed by councils namely, the General Council and the Goods Council, Services Council and Intellectual Property (TRIPS) Council.

Members

The WTO currently has 164 members, of which 117 are developing countries or separate customs territories accounting for about 95% of world trade.

The major guiding principles of the WTO

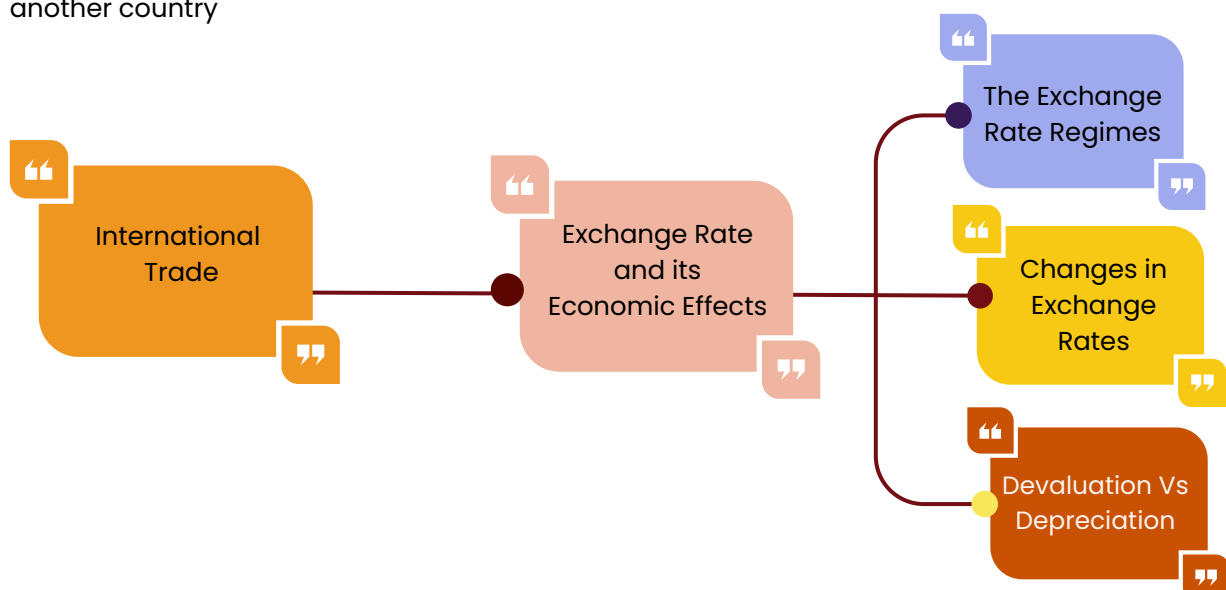
- Trade without discrimination, most-favoured-nation treatment (MFN)
- The national treatment principle (NTP)
- Free trade
- Predictability
- General prohibition of quantitative restrictions
- Greater competitiveness
- Tariffs as legitimate measures for protection
- Transparency in decision making
- Progressive liberalisation
- Market access and
- A transparent, effective, and verifiable dispute settlement mechanism.

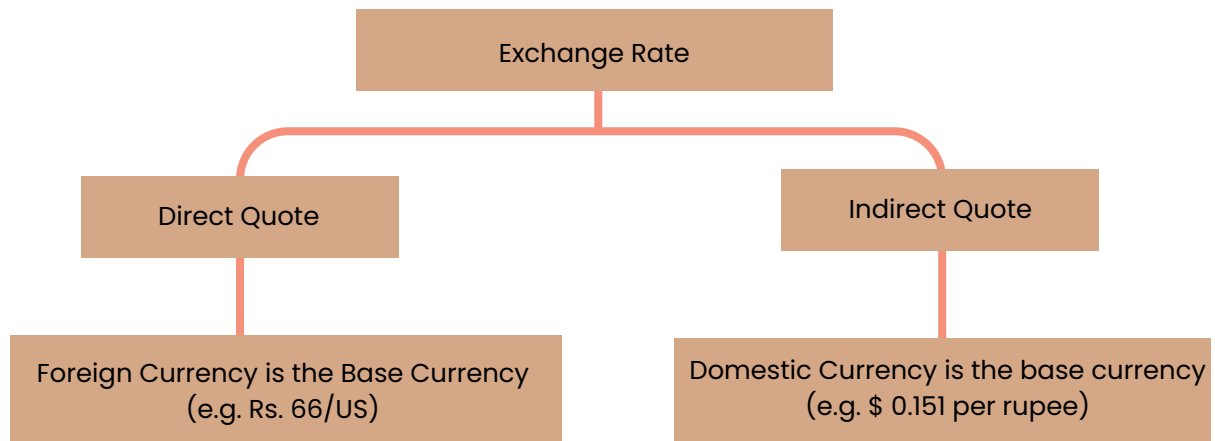
A Few WTO concerns

- Slow progress of multilateral negotiations,
- Uncertainties resulting from regional trade agreements,
- Inadequate or negligible trade liberalisation,
- Those which are specific concerns to the developing countries,
- Protectionism and lack of willingness among developed countries to provide market access,
- Difficulties that they face in implementing the present agreements,
- Apparent north-south divide,
- Exceptionally high tariffs,
- Tariff escalation, erosion of preferences and difficulties with regard to adjustments.

EXCHANGE RATE AND ITS ECONOMIC EFFECTS

Exchange rate is the rate at which the currency of one country exchanges for the currency of another country





Cross rate

The rate between Y and Z which is derived from the given rates of another set of two pairs of currency (say, X and Y, and, X and Z) is called cross rate.

Floating Exchange Rate Regime

- The equilibrium value of the exchange rate of a country's currency is market determined i.e the demand for and supply of currency relative to other currencies, determines the exchange rate.
- A floating exchange rate allows a government to pursue its own independent monetary policy and there is no need of market intervention or maintenance of reserves. But, volatile exchange rates generate a lot of uncertainties in relation to international transactions, Examples: Advanced economies like U.S.A, New Zealand, Sweden.

Exchange Rate Regime

An exchange rate regime is the system by which a country manages its currency in respect to foreign currencies.

A fixed exchange rate

- Also referred to as pegged exchanged rate, is an exchange rate regime under which a country's government announces, or decrees, what its currency will be worth in terms of either another country's currency or a basket of currencies or another measure of value, such as gold.
- A central bank may implement soft peg policy under which the exchange rate is generally determined by the market, or a hard peg where the central bank sets a fixed and unchanging value for the exchange rate
- A fixed exchange rate avoids currency fluctuations and eliminates exchange rate risks and transaction costs, enhances international trade and investment and lowers the levels of inflation. But, the central bank has to maintain an adequate amount of reserves and be always ready to intervene in the foreign exchange market.



Nominal Vs Real Exchange Rate

- Nominal Exchange Rate states how much of one currency can be traded for a unit of another currency.
- Real Exchange Rate: The 'Real Exchange Rate' incorporates changes in prices and describes 'how many' of a good or service in one country can be traded for 'one' of that good or service in a foreign country.
- Real exchange rate = Nominal exchange rate $\times$ Domestic price Index / Foreign price Index
- Real Effective Exchange Rate (REER) is the nominal effective exchange rate (a measure of the value of a currency against a weighted average of several foreign currencies) divided by a price deflator or index of costs.

Usually, the supply of and demand for foreign exchange in the domestic foreign exchange market determine the external value of the domestic currency, or in other words, a country's exchange rate.

Changes in exchange rates

- portrays depreciation or appreciation of one currency
- The terms, 'currency appreciation' and 'currency depreciation' describe the movements of the exchange rate.

Appreciation and Depreciation of Currency

when its value increases with respect to the value of another currency or a basket of other currencies. On the contrary, currency depreciates when its value falls with respect to the value of another currency or a basket of other currencies.

Devaluation

Is a deliberate downward adjustment in the value of a country's currency relative to another currency, group of currencies or standard.

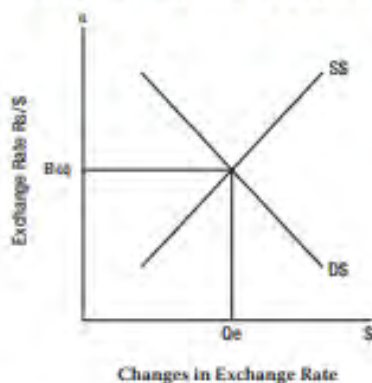
Effect of Appreciation

- An appreciation of a country's currency changes in import and export prices, will lead to changes in import and export volumes, causing changes in import spending and export revenue adversely affect the competitiveness of domestic industry, cause larger deficits and can worsen the current account

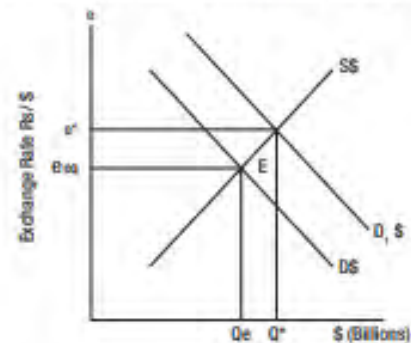
Effect of Depreciation of a Currency

- Exchange rate depreciation lowers the relative price of a country's exports, raises the relative price of its imports, increases demand both for domestic import-competing goods and for exports, leads to output expansion, encourages economic activity, increases the international competitiveness of domestic industries, increases the volume of exports and promotes trade balance.

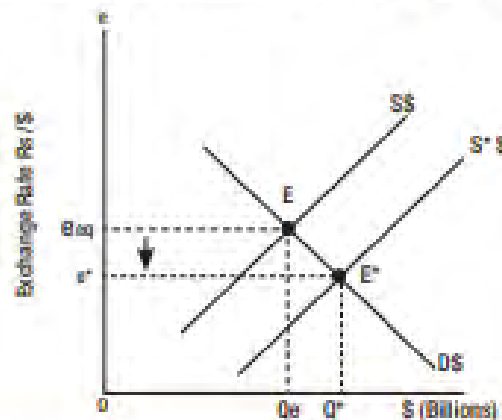
DETERMINATION OF NOMINAL EXCHANGE RATE



Home-Currency Depreciation under Floating Exchange Rates



Home-Currency Appreciation under Floating Exchange Rates



FOREIGN EXCHANGE MARKET

The wide-reaching collection of markets and institutions that handle the exchange of foreign currencies is known as the foreign exchange market.

Being an over-the-counter market, it is not a physical place; rather, it is an electronically linked network bringing buyers and sellers together and has only very narrow spreads

On account of arbitrage, regardless of physical location, at any given moment, all markets tend to have the same exchange rate for a given currency. Arbitrage refers to the practice of making risk-less profits by intelligently exploiting price differences of an asset at different dealing places.

TYPES OF TRANSACTIONS IN A FOREX MARKET :**SPOT MARKET**

Current transactions which are carried out in the spot market and exchange involves immediate delivery

FORWARD AND /OR FUTURE MARKET

- Contracts buy or sell currencies for future delivery which are carried out in forward and/or future
- Current transactions which are carried out in the spot market and contracts to buy or sell currencies for future delivery which are carried out in forward and futures markets

INTERNATIONAL CAPITAL MOVEMENTS

Foreign capital may flow into an economy in different ways, such as foreign aid, grants, borrowings, deposits from non resident Indians, investments in the form of foreign portfolio investment (FPI) and foreign direct investment (FDI)



Foreign direct investment is defined as a process whereby the resident of one country (i.e. home country) acquires ownership of an asset in another country (i.e. the host country) and such movement of capital involves ownership, control as well as management of the asset in the host country.

Direct investments are real investments in factories, assets, land, inventories etc. and have three components, viz., equity capital, reinvested earnings and other direct capital in the form of intra-company loans. FDI may be categorised as horizontal, vertical or conglomerate. Two-way direct foreign investments reciprocal investments.

The main reasons for foreign direct investments are profits, higher rate of return, possible economies of large-scale in operation, risk diversification, retention of trade patents, capture of emerging markets, lower host country environmental and labour standards, bypassing of non-tariff and tariff barriers, cost-effective availability of needed inputs and tax and investment incentives.

Foreign portfolio investment is the flow of 'financial capital' with stake in a firm at below 10 percent and does not involve manufacture of goods or provision of services, ownership management or control of the asset on the part of the investor.

Foreign direct investment (FDI)	Foreign portfolio investment (FPI)
Investment involves creation of physical assets	Investment is only in financial assets
Has a long-term interest and therefore remain invested for long periods	Only short-term interest and generally remain invested for short periods
Relatively difficult to withdraw	Relatively easy to withdraw
Not inclined to be speculative	Speculative in nature
Often accompanied by technology transfer	Not accompanied by technology transfer

Foreign direct investment (FDI)	Foreign portfolio investment (FPI)
Direct impact on employment of labour and wages	No direct impact on employment of labour and wages
Enduring interest in management and control	No abiding interest in management and control
Securities are held with significant degree of influence by the investor on the management of the enterprise	Securities are held purely as a financial investment and no significant degree of influence on the management of the enterprise

Modes of FDI

- Opening of a subsidiary or associate company in a foreign country,
- Equity injection into an overseas company,
- Acquiring a controlling interest in an existing foreign company,
- Mergers and acquisitions(M&A)
- Joint venture with a foreign company.
- Green field investment
- Brownfield investments

(i) Green field investment (establishment of a new overseas affiliate for freshly starting production by a parent company).

(ii) Brownfield investments (a form of FDI which makes use of the existing infrastructure by merging, acquiring or leasing, instead of developing a completely new one. For e.g., in India 100% FDI under automatic route is allowed in Brownfield Airport projects)

In India, foreign investment is prohibited in the following sectors:

- (i) Lottery business including Government/private lottery, online lotteries, etc.
- (ii) Gambling and betting including casinos, etc.
- (iii) Chitfunds
- (iv) Nidhi company
- (v) Trading in Transferable Development Rights
- (vi) Real Estate Business or Construction of Farm Houses

INDIAN ECONOMY

- India is believed to have had the largest economy of the ancient and the medieval world and controlled between one third and one fourth of the world's wealth. It was prosperous and self-reliant and had flourishing cities and self-sufficient villages.
- The advent of the Europeans and the rule of British from 1757 to 1947 brought about a marked shift in the economic history of India.

Ancient Economic Philosophy of India The earliest known treatise on ancient Indian economic philosophy is 'Arthashastra' the pioneering work attributed to Kautilya (Chanakya) (321–296 BCE) Arthashastra is recognized as one of the most important works on statecraft in the genre of political philosophy. It is believed to be a kind of handbook for King Chandragupta Maurya, the founder of Mauryan empire, containing directives as to how to reign over the kingdom and encouraging direct action in addressing political concerns without regard for ethical considerations. Artha is not wealth alone; rather it encompasses all aspects of the material well-being of individuals. Arthashastra is the science of 'artha' or material prosperity, or "the means of subsistence of humanity," which is, primarily, 'wealth' and, secondarily, 'the land'. The major focus of the work is on the means of fruitfully maintaining and using land. Kautilya emphasizes the importance of robust agricultural initiatives for an abundant harvest which will go toward filling the state's treasury. Taxes, which were charged equal for private and state-owned businesses, must be fair to all and should be easily understood by the king's subjects. Being a multidisciplinary discourse on areas such as politics, economics, military strategy, diplomacy, function of the state, and the social organization, Kautilya's writings relate to statecraft, political science, economic policy and military strategy. True kingship is defined as a ruler's subordination of his own desires and ambitions to the good of his people; i.e. a king's policies should reflect a concern for the greatest good of the greatest number of his subjects. The preservation and advancement of this good was comprised of seven vital elements, namely the King, Ministers, Farmlands, Fortresses, Treasury, Military and the Allies.

- Rapid industrialization of the economy was the cornerstone of Nehru's development strategy. The concept of 'planned modernization' meant a systematic planning to support industrialization.
- The Industrial Policy Resolution (1948) envisaged an expanded role for the public sector and licensing to the private sector.
- The seeds of early liberalisation and reforms were sown during the 1980s, especially after 1985. In early 1980s considerable efforts were made to restore reasonable price stability through a combination of tight monetary policy, fiscal moderation, and a few structural reforms.
- The reform initiatives- covering three areas, namely industry, trade and taxation spanning 1981 to 1989, is referred to as 'early liberalization' or 'reforms by stealth' to denote its ad hoc and not widely publicized nature. They were aimed at changing the prevailing thrust on 'inward-oriented' trade and investment practices.
- The 'New Industrial Policy' announced by the government on 24 July 1991 sought to substantially deregulate industry so as to promote growth of a more efficient and competitive industrial economy.
- The policy put an end to the 'License Raj' by removing licensing restrictions for all industries except for 18 on strategic considerations.
- Reforms resulted in major changes such as increasing integration with the global economy, progressive shift towards a market oriented economy, sizeable reduction in government's market intervention and controls, unprecedented growth of private sector investments and initiatives, increased levels of international competitiveness, easier access to foreign technology, inputs, know-how and finance, steady inflow of foreign direct and portfolio investments, solid cushion of foreign exchange reserves, increased incomes, large domestic market, sustainable levels of aggregate demand, substantial reduction in poverty, greater customer choice, increased efficiency, phenomenal growth of infrastructure sector and the deepening of the financial sector.
- On 1st January 2015, the apex policy-making body namely Planning Commission, was replaced by the National Institution for Transforming India (NITI) Aayog with the objective to 'spur innovative thinking by objective 'experts' and promote 'co-operative federalism' by enhancing the voice and influence of the states.
- NITI Aayog is expected to serve as a 'Think Tank' of the government. [and] as 'directional and policy dynamo'. The key initiatives of NITI Aayog are: 'Life', The National Data and Analytics Platform (NDAP), Shooanya, E-Amrit, India Policy Insights (IPI), and 'Transforming India's Gold Market'.
- The Department for Promotion of Industry and Internal Trade (DPIIT) has a role in the formulation and implementation of industrial policy and strategies for industrial development.

- Some of the policies for industrial development include introduction of goods and services tax (GST) 2017 as a single domestic indirect tax law for the entire country, reduction in corporate tax of domestic companies, 'Make In India' a 'Vocal for Local' initiative, Ease of Doing Business, the National Single Window System, PM Gati Shakti National Master Plan, National Logistics Policy (NLP), Production Linked Incentive (PLI) Scheme, Industrial Corridor Development Programme, FAME-India Scheme, Udyami Bharat', PM Mega Integrated Textile Region and Apparel, Remission of Duties and Taxes on Export Products (RoDTEP), National Logistics Policy (NLP), Start-up India, Programme of Public Procurement (Preference to Make in India) and the Emergency Credit Line Guarantee Scheme.
- A remarkable feature of the post reform Indian economy is the unconventional experience of bypassing the secondary sector in the growth trajectory by a shift from agriculture to the services sector.
- India is among the top 10 World Trade Organization (WTO) members in service exports and imports. India's services exports at US\$ 27.0 billion recorded robust growth in November 2022 due to software, business, and travel services.
- To ensure the liberalisation of investment in various industries, the government has permitted 100 per cent foreign participation in telecommunication services through the Automatic Route including all services and infrastructure providers.
- The India Development Update (IDU) of the World Bank published in November 2022 holds the optimistic view that compared to other emerging economies, India is much more resilient to withstand adversities in the global arena, while acknowledging the fact that India had to face an unusually challenging external environment following the Russia-Ukraine war, increased crude oil and commodity prices, persistent global supply disruptions, tighter financial conditions and high domestic inflationary pressures.



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