CA FOUNDATION

BUSINESS ECONOMICS
FLASHBOOK

Preface

At PhysicsWallah, we understand that effective revision is the key to exam success. The Flashbook Series is designed to help students grasp essential concepts quickly and efficiently, making last-minute preparation seamless and stress-free.

Each Flashbook presents key concepts, formulas, and summaries in a clear, concise, and structured format, ensuring that students can revise effectively and efficiently. With a focus on exam-oriented learning, these books serve as the perfect tool to reinforce understanding, boost retention, and enhance recall in minimal time.

Crafted by experienced faculty and content experts, this series follows a systematic approach to revision, breaking down complex topics into easily digestible points. Whether used for quick reference, daily recaps, or final revision, these Flashbooks are designed to streamline learning and maximize exam performance.

We hope this Flashbook becomes an essential part of your preparation journey, helping you revise with confidence and excel in your exams!

Contents

NATURE AND SCOPE OF BUSINESS ECONOMICS

- Unit 1: Introduction
- Unit 2: Basic Problems of an Economy

INTRODUCTION

1. Introduction

1.1 Origin of Economics

- ❖ **Economics** comes from the Greek term for **'household'**.
- ❖ Before the 19th century, it was called **'Political Economy'**.
- ❖ **Adam Smith's** book. *The Wealth of Nations* (1776), is regarded as the first modern economics work.
- ❖ Full name of The book is **'An Inquiry into the Nature and Causes of the Wealth of Nations'**

1.2 Fundamental Facts

- ❖ 'Human beings have unlimited wants'; and
- ❖ The means to satisfy these unlimited wants are relatively scarce' form the subject matter of Economics

1.3 Business Economics (Managerial Economics)

- ❖ Introduced by **Joel Dean (1951)**
- ❖ Application of **economic analysis** in business decision-making
- ❖ Helps in **optimal use of scarce resources**
- ❖ Used by **businesses, NGOs & non-profits**

1.4 Key Features of Business Economics

Decision-Making	Business Economics uses economic analysis to make decisions on the best use of an organization's scarce resources.
Also Known As	Managerial Economics.
Integration	Combines economic theory with business practice.
Tools	Economic theory provides tools like demand, supply, cost, production, price, marketing, and competition; Business Economics applies these tools for decision-making.
Bridging the Gap	Fills the gap between economic theory and business practice.
Applicability	Also useful for NGOs and non-profit organizations.

2. Micro vs. Macro Economics

2.1 Macro Economics (General Equilibrium Analysis, Theory of Income and Employment)

> ❖ **Studies economy as a whole** (aggregate level)

Focus on Key Factors

Output & National Income	General Price Level & Interest Rate	Savings, Investment & Employment	Economic Growth & Foreign Trade
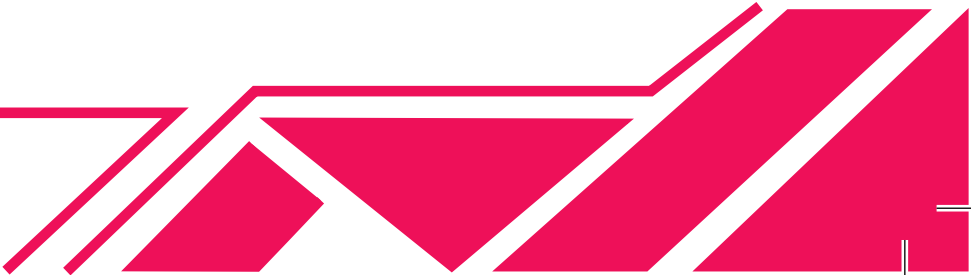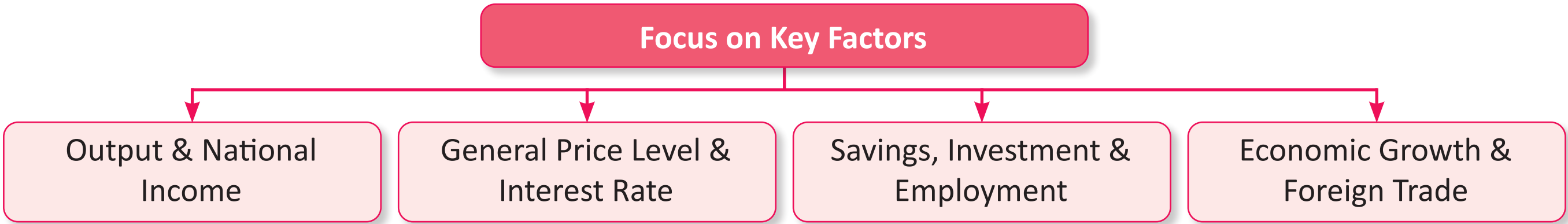
2.2 Micro Economics (Price Theory/Slicing Theory)

❖ **Studies individual units** (firms, consumers)

❖ **Core of Business Economics**

Key Focus Areas

| Product & Factor Pricing | Consumer Behavior & Firm Decisions | **Industry Location & Economic Segments** |
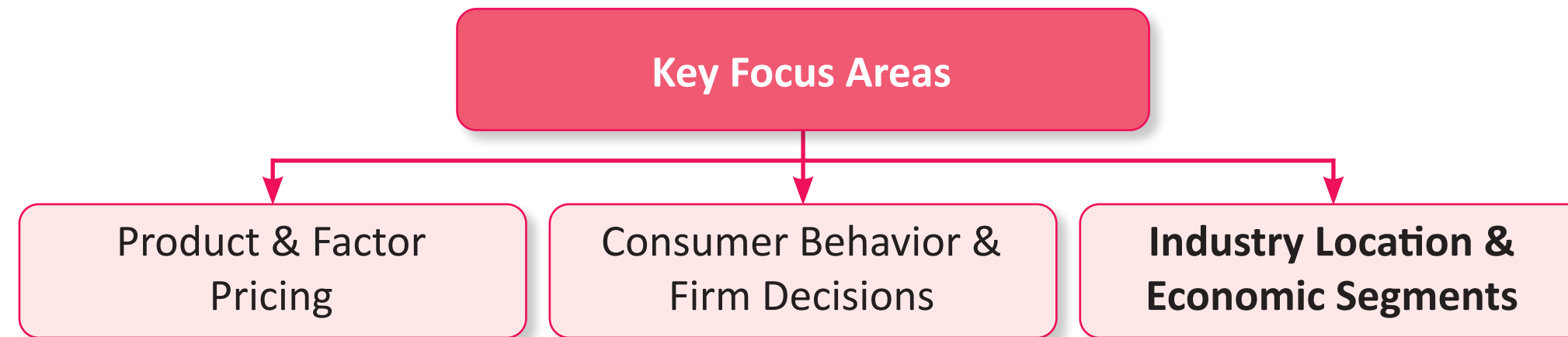
❖ **In short:** Macro = Big Picture | Micro = Detailed View

3. Nature of Business Economics

Note: {(SPAM-MINT)- Love sir's way of learning}

❖ Business Economics is a Science

❖ Pragmatic in Approach

❖ Business Economics is an art

❖ Based on Micro Economics

❖ Incorporates elements of Macro Analysis

❖ Interdisciplinary in nature

❖ Use of Theory of Markets and Privates Enterprises	
❖ Normative in nature	

3.1 Business Economics as a Science & Art

Science	Systematic knowledge with cause-effect relationships
Art	Practical application of rules & principles

3.2 Core Characteristics

❖ **Based on Microeconomics,** but integrates Macro tools
❖ **Uses Market & Private Enterprise Theories**
❖ **Pragmatic & Normative** (Solves real-world business problems)

3.3 Positive vs. Normative Economics

Positive Economics	Normative Economics
❖ Studies **What is**	❖ Studies **What should be**
❖ Can be **empirically verified**	❖ May or may not be verified
❖ Based on **facts & logic**	❖ Based on **ethics & values**
❖ **Objective & descriptive**	❖ **Subjective & prescriptive**
❖ **Example:** Demand falls when price rises	❖ **Example:** Rich should pay more taxes

❖ **(Positive = Facts | Normative = Opinions)**
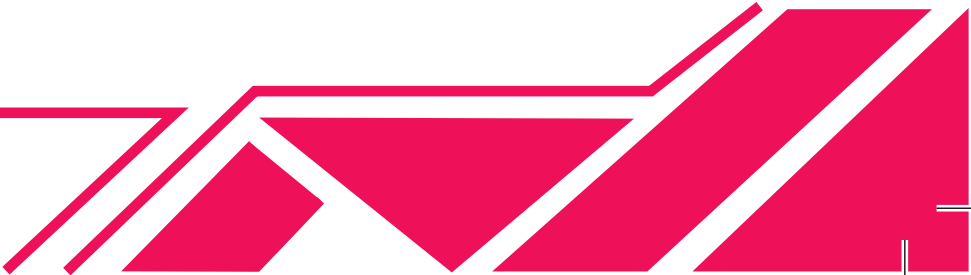
4. Scope of Business Economics

❖ **Business Economics = Solving Internal & External Challenges!**

4.1 Internal Issues (Operational)

❖ Arise within the organization

4.2 Micro Economics for Internal Issues: (Tools)

❖ Demand Analysis & Forecasting
❖ Production & Cost Analysis
❖ Inventory Management
❖ Market Structure & Pricing Policies
❖ Resource Allocation
❖ Capital & Investment Decisions
❖ Profit Analysis
❖ Risk & Uncertainty Analysis

4.3 External Issues (Environmental)

❖ Affect business performance

4.4 Macro Economics for External Issues

❖ **Theories:**
○ Business Cycle, Global Trends, Fiscal Policies

BASIC PROBLEMS OF AN ECONOMY

1. Central Economic Problems

1.	**What to Produce?** (Deciding goods & services based on limited resources.)
2.	**How to Produce?** (**Labour vs. Capital Intensive** technology choices.)
3.	**For Whom to Produce?** (Allocating goods & services among people.)
4.	**What Provisions are to be made for economic Growth?** (Saving & investing for future growth.)

2. Types of Economies

Economy Type	Capitalist Economy	Socialist Economy	Mixed Economy
Definition	❖ Private ownership, profit-driven, minimal government role.	❖ Government controls production, collective ownership.	❖ Combines market and planned economy.
Key Features	❖ Private Property ❖ Consumer Sovereignty Competition	❖ State Ownership ❖ If Central Planning ❖ No Consumer Choice	❖ Public + Private Sectors ❖ Government Regulation & Welfare

Merits	❖ Free market efficiency ❖ Innovation & growth ❖ Low production costs ❖ Consumer choice ❖ Competitive pricing	❖ Equal wealth ❖ No advertisement wastage ❖ Job security ❖ Social welfare ❖ If Balanced growth	❖ Economic stability ❖ Consumer freedom ❖ Reduces inequality ❖ Encourages innovation ❖ Balance of sectors
Demerits	❖ Wealth inequality ❖ Monopolies ❖ Costly healthcare & education ❖ Job insecurity ❖ Market manipulation	❖ Government monopoly ❖ Bureaucracy & corruption ❖ Limited choices ❖ Inefficient pricing ❖ No private ownership	❖ Excessive government control ❖ Hard to balance sectors ❖ Wealth gap risk ❖ Government inefficiency ❖ Uneven sector growth
Examples	❖ U.S., U.K., Germany, Japan, Mexico, Singapore, etc.	❖ Vietnam, China and Cuba, North Korea	❖ India

2
Chapter

THEORY OF DEMAND AND SUPPLY

- **Unit 1: Law of Demand and Elasticity of Demand**
- **Unit 2: Theory of Consumer Behaviour**
- **Unit 3: Supply**

LAW OF DEMAND AND ELASTICITY OF DEMAND

1. Meaning of Demand

❖ **Demand:** Quantity buyers are willing and able to buy at various prices over time.
❖ **Effective Demand:** Desire + Purchasing power + Willingness to buy.
❖ **Quantity Demanded**
○ Quantity buyers will purchase at a specific price.
○ Flow concept (changes over time).

2. Factors Determining Demand: (Short Trick – TIPPER A CNG)

2.1 Main Factors

1. **Price of the Commodity**
○ **Inverse relationship:** higher price = lower demand; lower price = higher demand.
○ **Example:** If samosa price rises, fewer people buy.
2. **Price of Related Goods**
○ **Complementary goods:** Price rise decreases demand for both (e.g., tea & sugar).
○ **Substitutes:** Price rise increases demand for the alternative (e.g., Pepsi & Coca-Cola).

3. **Disposable Income**
❍ More income = more demand for normal goods, less for inferior goods.
❍ **Example:** Higher income = more luxury good demand.
❍ Essentials like food and water: less proportional rise with income.
4. **Tastes and Preferences**
❍ Fashionable goods = higher demand.
❍ External effects like demonstration, bandwagon, Veblen & snob effects influence demand.
❍ **Example:** People buy latest gadgets due to the demonstration effect.
5. **Consumers' Expectations**
❍ Future expectations (prices, income) influence current demand.
❍ **Example:** Expecting petrol price rise = current demand increases.

2.2 Other Factors

❖ **Size of Population**: Larger population, higher demand.
❖ **National Income**: Higher income, more demand.
❖ **Credit**: Easier credit, higher demand.
❖ **Government Policy**: Taxes/subsidies affect demand.
❖ **Age Distribution of Population**

3. Demand Function

- ❖ **Definition**: A demand function shows the relationship between the quantity demanded of a product and its determinants (independent variables).
- ❖ **Formula**:
- ❖ **Dx** = f(Px, Y, Py, T, etc.)
- ❖ Where:
  - ○ **Dx** = Quantity demanded of product X
  - ○ **Px** = Price of product X
  - ○ **Y** = Consumer's disposable income
  - ○ **Py** = Price of related goods
  - ○ **Pc** = Price of complementary goods
  - ○ **T** = Consumer's tastes and preferences

4. Law of Demand

4.1 Demand Law

- ❖ **Inverse Relationship**: Price $\uparrow$ $\rightarrow$ Quantity Demanded $\downarrow$, and vice versa.
- ❖ **Marshall's Quote**: "The greater the amount to be sold, the smaller must be the price."
- ❖ **Factors Constant (ceteris paribus):** Prices of related goods, income, preferences.

4.2 Demand Schedule

❖ **Definition**: Shows quantities at various prices, other factors constant.

4.3 Demand Curve

❖ **Definition**: Graphical representation of the demand schedule.

❖ **Slope**: Downward (inverse relationship).

❖ **Formula:** $\text{Slope} = -\dfrac{\Delta P}{\Delta Q}$

4.4 Market Demand Curve

❖ **Definition**: Total demand from all buyers.

❖ **Summation**: Lateral/horizontal summation of all individual demand curves.

4.5 Rationale for Law of Demand

1. **Price Effect**:
   - **Substitution**: Cheaper goods attract more demand.
   - **Income**: Lower prices increase buying power.
2. **Utility Maximization**: Consumers buy more at lower prices.
3. **New Consumers**: Lower prices attract new buyers.
4. **Different Uses**: Lower prices boost demand for new uses.

4.6 Exceptions to the Law

1. **Conspicuous Goods**: Higher prices increase demand (e.g., diamonds).
2. **Giffen Goods**: Low-quality, necessity goods increase in demand as price rises.
3. **Conspicuous Necessities**: Essentials (e.g., TV, AC) may defy the law.
4. **Future Price Expectations**: Anticipated price rise increases demand now.
5. **Irrational Behaviour**: Inconsistent demand due to incomplete info.
6. **Necessities**: Demand stays constant for essential goods.
7. **Speculative Goods**: Demand rises as price increases (e.g., stock market).

5. Expansion & Contraction of Demand- (Both are the types of Movement Along Demand Curve)

Expansion of Demand/Increase in Quantity Demanded	Contraction of Demand/Decrease in Quantity Demanded
❖ Price falls → Demand rises	❖ Price rises → Demand falls
❖ Moves downward along the demand curve	❖ Moves upward along the demand curve
❖ No change in other factors	❖ No change in other factors

Quantity Demanded
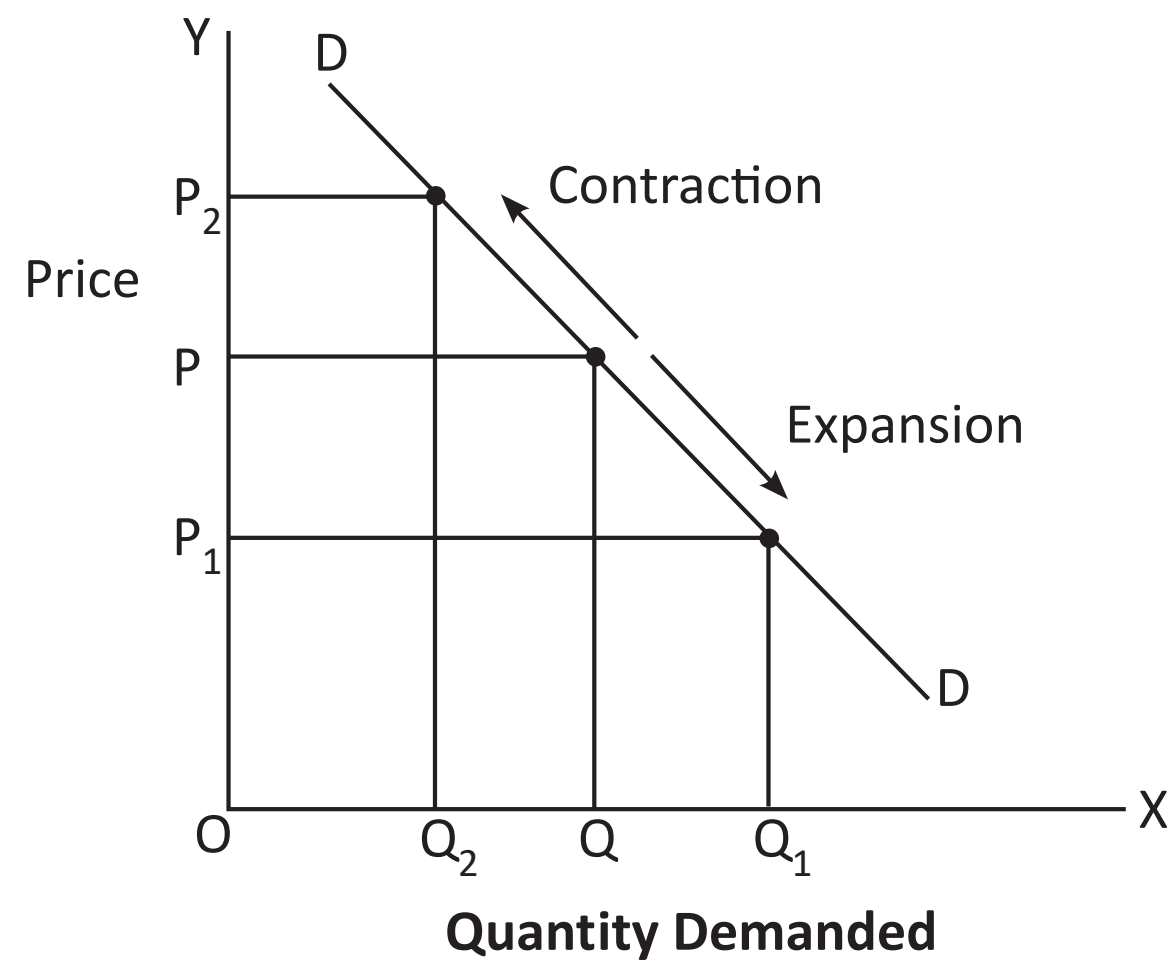
6. Increase and Decrease in Demand - (Both are the Types of Shift in Demand Curve)

Increase of Demand	Decrease of Demand
❖ Demand rises due to factors other than price (income, preferences, etc.)	❖ Demand falls due to factors other than price
❖ Rightward shift of demand curve	❖ Leftward shift of demand curve

Increase in Demand — Price (in Rs.) vs Quantity Demanded (in Units); points A (150), B (200) at price 10; curves D–D and D₁.

Decrease in Demand — Price (in Rs.) vs Quantity Demanded (in Units); points B (150), A (200) at price 10; curves D–D and D₁.
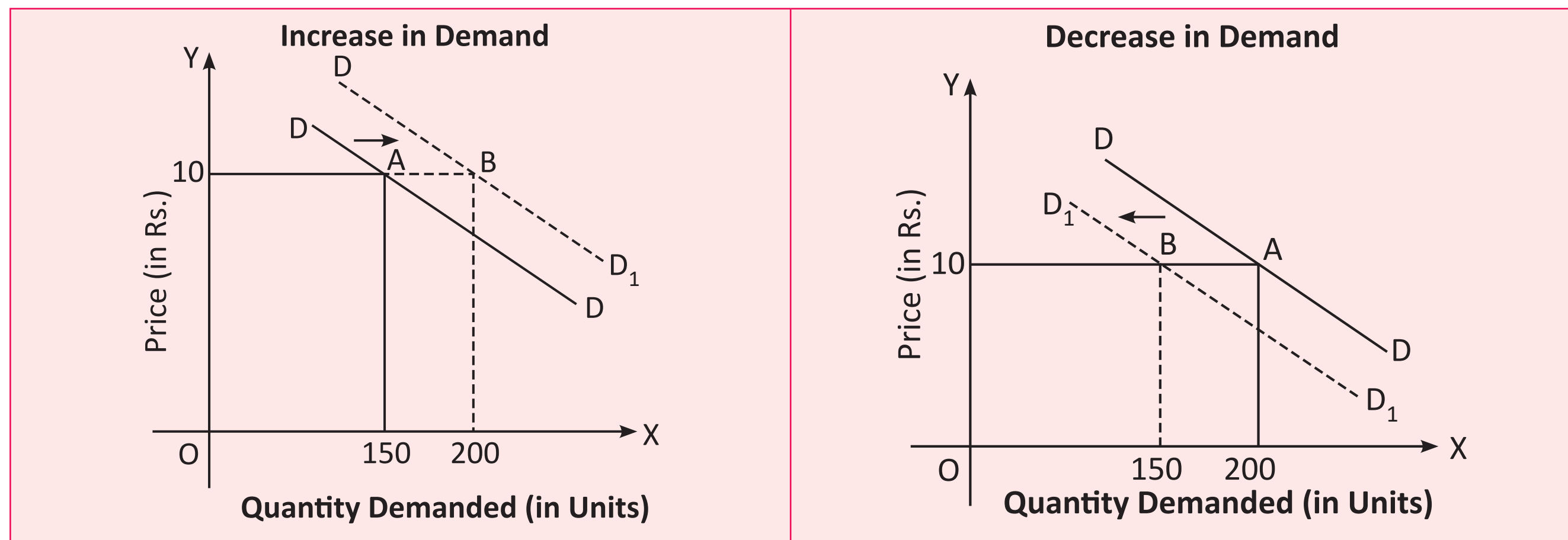
7. Elasticity of Demand

7.1 Meaning and Types

❖ Measures responsiveness of demand to changes in factors

❖ Formula: $E = \dfrac{\%\Delta Q}{\%\Delta F}$

[Where, E = Elasticity, $\%\Delta Q$ = Percentage change in quantity demanded, $\%\Delta F$ = Percentage change in the relevant factor (such as price, income, or price of a related good)]

Types
1. **Price Elasticity:** Responsiveness to changes in the product's price.
2. **Cross Elasticity:** Response to price changes of related products.
3. **Income Elasticity:** Response to changes in consumer income.
4. **Advertisement Elasticity:** Response to changes in advertising expenditure.

7.2 Price Elasticity of Demand

❖ **Formula**: $E_p = \dfrac{\Delta Q}{\Delta F} \times \dfrac{P}{Q}$
❖ **Negative Sign:** Shows **Law of Demand** (Price $\uparrow \rightarrow$ Quantity Demanded $\downarrow$).
❖ **Magnitude Focus:** Use **absolute value** (Ignore the negative sign).
❖ **Example:** $E_p = -1.5 \rightarrow$ Consider **1.5** (Elastic Demand).

7.3 Point Elasticity of Demand

❖ **Point Elasticity of Demand:** Measures elasticity at a specific point on the demand curve.
❖ **Small Price Change:** Used when price change is **infinitesimal** (very small).
❖ **Formula:** $E_p = \dfrac{dQ}{dP} \times \dfrac{P}{Q}$ (derivative method of point elasticity)

7.4 Measurement of Elasticity on a Linear Demand Curve–Geometric Method

❖ **Formula:** $E_p = \dfrac{\text{Lower Segment of the Demand Curve}}{\text{Upper Segment of the Demand Curve}}$
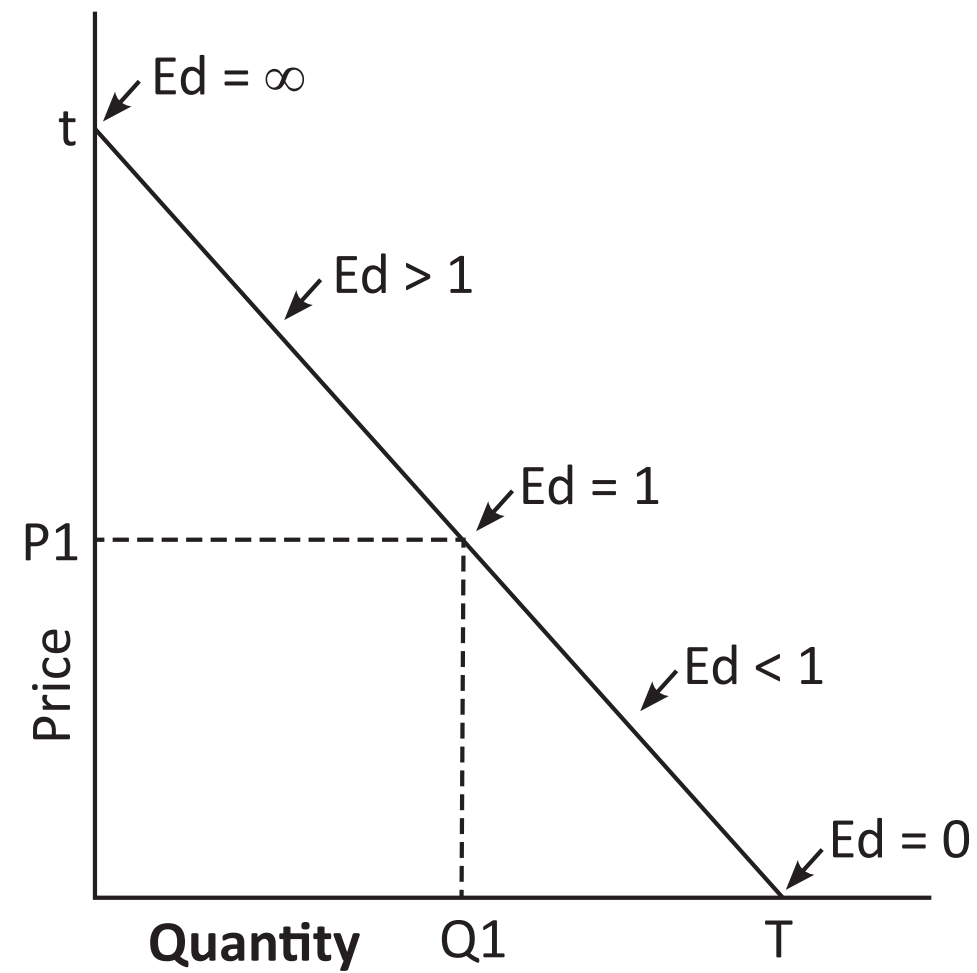
7.5 Arc Elasticity of Demand (Mid-point Method)

❖ **Formula:** $Ep = \dfrac{Q_2 - Q_1}{Q_2 + Q_1} \times \dfrac{P_2 + P_1}{P_2 - P_1}$

Quantity Demanded
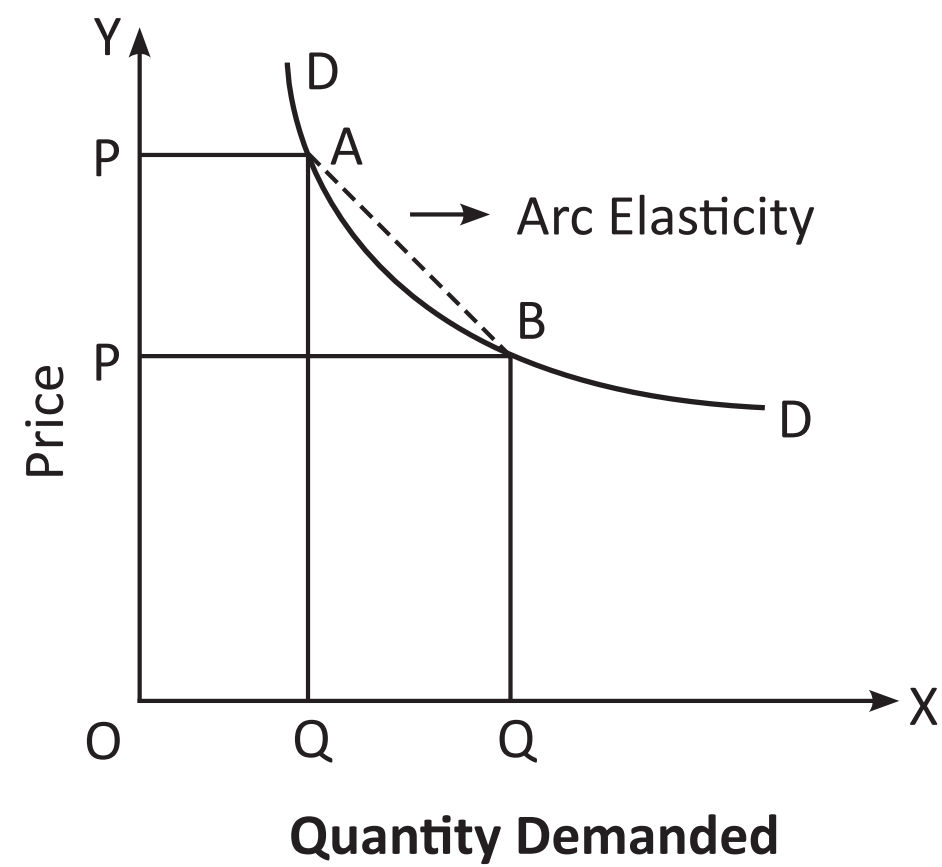
7.6 Total Outlay (Expenditure) Method of Elasticity of Demand

If Price and Total Expenditure are:

> ❖ **Indirectly Related (Ep > 1):** Price $\uparrow$ $\rightarrow$ Total Expenditure $\downarrow$ and vice-versa

> ❖ **Directly Related (Ep < 1):** Price $\uparrow$ $\rightarrow$ Total Expenditure $\uparrow$ and vice-versa

> ❖ **Not Related (TE $\rightarrow$ Constant, Ep = 1):** Price $\leftrightarrow$ Total Expenditure remains Constant

7.7 Total Revenue

> ❖ **Total Revenue (TR)** = Price × Quantity sold

- ❖ **Price Effect**: Price $\uparrow$ → Each unit sold at a higher price → Revenue $\uparrow$
- ❖ **Quantity Effect**: Price $\uparrow$ → Fewer units sold → Revenue $\downarrow$

7.8 Determinants of Price Elasticity of Demand: (Short Trick – (PUNCH BSTT)

1. **Availability of Substitutes**: More substitutes = Greater elasticity

2. **Position in Consumer's Budget**: Goods with small income share are inelastic, larger share is elastic

3. **Nature of the Commodity**: Luxury goods = Elastic, Necessities = Inelastic

4. **Number of Uses**: More uses = Greater elasticity

5. **Time Period**: Long term = Elastic, Short term = Inelastic

6. **Consumer Habits**: Habitual consumers = Inelastic
   (Cigarettes, alcohol)

7. **Tied Demand**: Complementary goods = Inelastic
   (Printers and Ink)

8. **Price Range**: High/Low price = Inelastic, Mid-range = Elastic

9. **Minor Complementary Items**: Cheap complements = Inelastic
   (Cheap soap for washing machines)

8. Income Elasticity of Demand

❖ **Income Elasticity of Demand**: Measures how much quantity demanded changes with changes in consumer income.

❖ **Formula**: $E_i = \dfrac{\Delta Q}{\Delta Y} \times \dfrac{Y}{Q}$

8.1 Types

1. **Zero Income Elasticity (Ei = 0)**: No change in demand with income change.
   (Salt, Kerosene Oil)
   Neutral Goods.

2. **Negative Income Elasticity (Ei < 0)**: Income $\uparrow \rightarrow$ Demand $\downarrow$
   (Jawar, Bajra)
   Inferior Goods.

3. **Unitary Income Elasticity (Ei = 1)**: Income $\uparrow \rightarrow$ Proportion spent stays the same.
   (No change in spending)

4. **Income Elasticity Greater Than Unity (Ei > 1)**: Income $\uparrow \rightarrow$ Demand $\uparrow$ more than proportionally.
   (**Luxuries** like cars, TVs)

5. **Income Elasticity Less Than Unity (Ei < 1)**: Income $\uparrow \rightarrow$ Demand $\uparrow$ less than proportionally.
   (**Basic goods** like vegetables)

8.2 Relationship Between Income Elasticity and The Proportion of Income Spent

1. **Proportion of income spent stays the same** → Income elasticity = 1
   (Income ↑, spending ratio stays constant)

2. **Proportion of income spent increases** → Income elasticity > 1
   (Income ↑, more spent on the good)

3. **Proportion of income spent decreases** → Income elasticity < 1
   (Income ↑, less spent on the good)

9. Cross Elasticity of Demand

9.1

Definition: Examines how changes in the prices of related goods impact the demand for a specific commodity. Focuses on complementary and substitute goods.

❖ **Formula:** $E_c = \dfrac{\Delta q_x}{\Delta p_Y} \div \dfrac{p_y}{q_x}$

9.2 Interpretation of E_c Values

Type of Good (Substitutes)	Cross-Price Elasticity (E_c)
Perfect Substitutes	Infinite (∞)
Close Substitutes	Positive & Large

Not Close Substitutes	Positive & Small
Unrelated Goods	Zero (0)

Type of Good (Complementary)	Cross-Price Elasticity (E_c)
Strong Complements	Negative & Large
Weak Complements	Negative & Small

10. Advertisement Elasticity of Demand

❖ Measures how demand changes with a 1% change in advertising expenditure.

❖ **Formula**: $E_a = \dfrac{\Delta Q_d / Q_d}{\Delta A / A}$

❖ **Elasticity Interpretation**

E_a Value	Description
$E_a = 0$	No response to ad spending.
$0 < E_a < 1$	Demand increases less than ad spending.
$E_a = 1$	Demand increases proportionally with ad spend.
$E_a > 1$	Demand increases faster than ad spending.

2 Unit — THEORY OF CONSUMER BEHAVIOUR
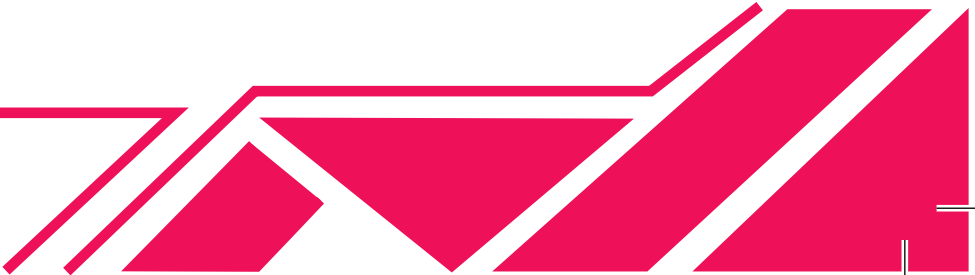
1. Nature of Human Wants

1.1 Meaning of Wants

- ❖ **Wants:** Desires and motives of humans in Economics.
- ❖ **Choice:** Limited resources mean prioritizing urgent wants.

1.2 Features of Wants

- ❖ **Unlimited**
- ❖ **Differ in Intensity**: Some are urgent.
- ❖ **Satiable**: Can be satisfied.
- ❖ **Subjective & Relative**: Vary by time, place, person.
- ❖ **Multiple Causes**: Arise from instincts, needs, status.
- ❖ **Habits & Customs**: Become regular.
- ❖ **Affected by External Factors**: Income, taste, ads.

1.3 Classification of Wants

Category	Description	Examples
Necessaries	Essential for living.	Food, clothing, shelter
Comforts	Make life more comfortable and satisfying, but less urgent than necessaries.	Tasty food, good house, suitable clothes
Luxuries	Superfluous, expensive items that are not essential for living.	Expensive clothing, exclusive cars, classy furniture

2. Utility

❖ **Definition:** The want-satisfying power of a commodity.

❖ **Features of Utility:**

  ○ Subjective,

  ○ Time/Place Dependent,

  ○ Utility ≠ Usefulness.

❖ **Two Approaches to Utility:**

1. **Marginal Utility** (Cardinal) – Measures utility in terms ot ultils.

2. **Indifference Curve** (Ordinal) – Ranks preferences, no measurement.

3. Cardinal Approach of Utility Analysis - by Marshall

3.1 Concept of Total Utility and Marginal Utility

> ❖ **Total Utility (TU):** The sum of marginal utilities from consuming different units.
>
> $TU = MU_1 + MU_2 + \ldots + MUn$
>
> ❖ **Marginal Utility (MU):** The utility derived from consuming one additional unit.
>
> ❖ $MU = TU_n - TU_{n-1}$ or $MU = \dfrac{\Delta TU}{\Delta Q}$
>
> ❖ MU can be positive, zero, or negative.

3.2 Law of Diminishing Marginal Utility

> ❖ **Meaning**: As you consume more, marginal utility declines.
>
> ❖ **Important**: **Marginal utility** (not total) decreases. + *MU*

3.3 Relationship between MU & TU

1. TU rises	MU positive but diminishing.
2. MU is zero	TU is maximum (saturation point).
3. MU is negative	TU starts falling.
4. MU is the rate of change	MU is the slope of TU.

3.4 Consumer Equilibrium

- ❖ The situation where a consumer maximizes his total utility out of given income and resources.

- ❖ **Conditions of Consumer Equilibrium**

- ❖ **One Good:**

$$\frac{MU_x}{P_x} = MU_{money}$$

- ❖ **Two Goods:**

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} MU_{money}$$

3.5 Assumptions/Limitations of this Law of Diminishing Marginal Utility

- ❖ **Homogenous Units**: Units should be identical, with unchanged consumer preferences.

- ❖ **Standard Units of Consumption**: Units should be standardized.

- ❖ **Continuous Consumption**: No time gap between consumption of units.

- ❖ **Prestige Goods**: Law doesn't apply to luxury goods (e.g., gold, diamonds).

- ❖ **Unrealistic Assumptions**: Assumes cardinal utility, constant marginal utility of money, and rationality.

4. Consumer Surplus

4.1 Definition

❖ The difference between what a consumer is willing to pay and what they actually pay.

○ **Formula**: Consumer Surplus = Willingness to Pay - Actual Payment

○ **Diagram**: Consumer surplus is the area below the demand curve and above the price line.

4.2 Uses of Consumer Surplus

1. Study of Consumer behaviour to ensure repeated purchases.

2. Helpful in Price Discrimination

3. Useful in Investment decisions

4. Useful in Pricing Decisions

4.3 Criticisms/Limitations

❖ Imaginary Concept.

❖ Cardinal measurement is not possible.

❖ Not Measurable in Money.

❖ Not Applicable to Necessaries & Prestige Goods.

5. Indifference Curve (IC) Analysis – by Hicks and Allen

5.1 Indifference Curve (ISO-utility or Equal Utility Curve)

❖ The curve showing combinations of two goods giving the same satisfaction.

Indifference Map
↓
Presentation of more than one IC (Family of IC)
In a single diagram
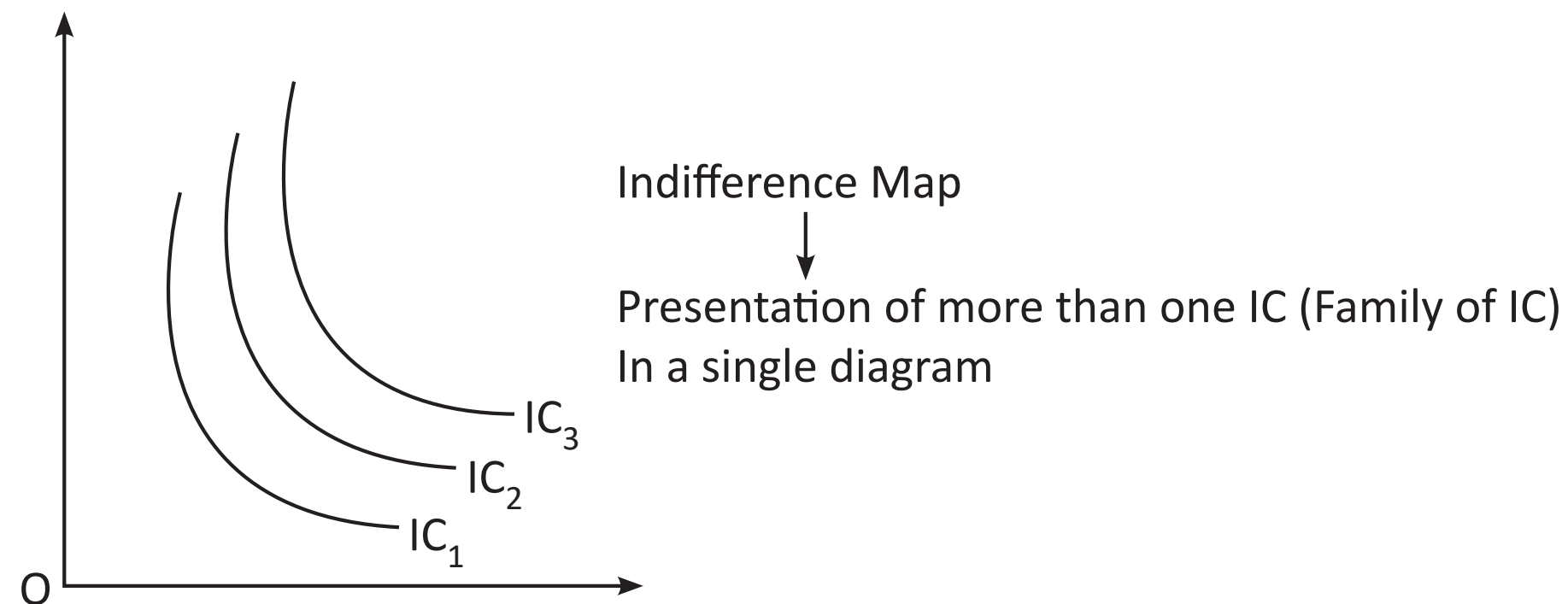
5.2 Marginal Rate of Substitution

❖ The rate at which a consumer is prepared to exchange goods X and Y.

❖ **MRS of X for Y** = MU_x / MU_y (Marginal utility of X / Marginal utility of Y).

❖ **MRS** ↓ → IC Convex to origin.

❖ **MRS** ↑ → IC Concave to origin.

❖ **MRS** → **Constant** → IC Straight line

5.3 Properties of Indifference Curve

- ❖ Slopes downward to the right- **Reason**: Trade-off
- ❖ Always convex to the origin- **Reason**: Diminishing MRS
- ❖ Never intersect each other- **Reason**: Transitivity
- ❖ Higher Indifference Curves Represents Higher Level of Satisfaction- **Reason**: Monotonic preference
- ❖ Indifference curve will not touch either X-axis or Y-axis- **Reason**: Assumes consumer considers two goods; touching either axis means only one good is considered.

5.4 Two Extreme Situations of IC

- ❖ For Perfect Substitutes → **Straight Line**
- ❖ For Perfect Complements → **L-Shaped**

5.5 The Budget Line/Price Line

- ❖ A higher indifference curve means more satisfaction.
- ❖ Consumer aims for the highest IC but is limited by:
  1. **Income** – Money available to spend
  2. **Prices** – Cost of desired goods
- ❖ These factors create a **budget constraint**, limiting choices.

5.6 What does Budget Line Show

❖ **Budget Line** shows the maximum combinations of **two goods** a consumer can buy with given **income & prices**.

❖ **Example:** If income = ₹100, price of X = ₹5, and price of Y = ₹2:

Only X: 20 units (₹100 ÷ ₹5)

Only Y: 50 units (₹100 ÷ ₹2)

Any Combination within these limits.

❖ **Graphically**:
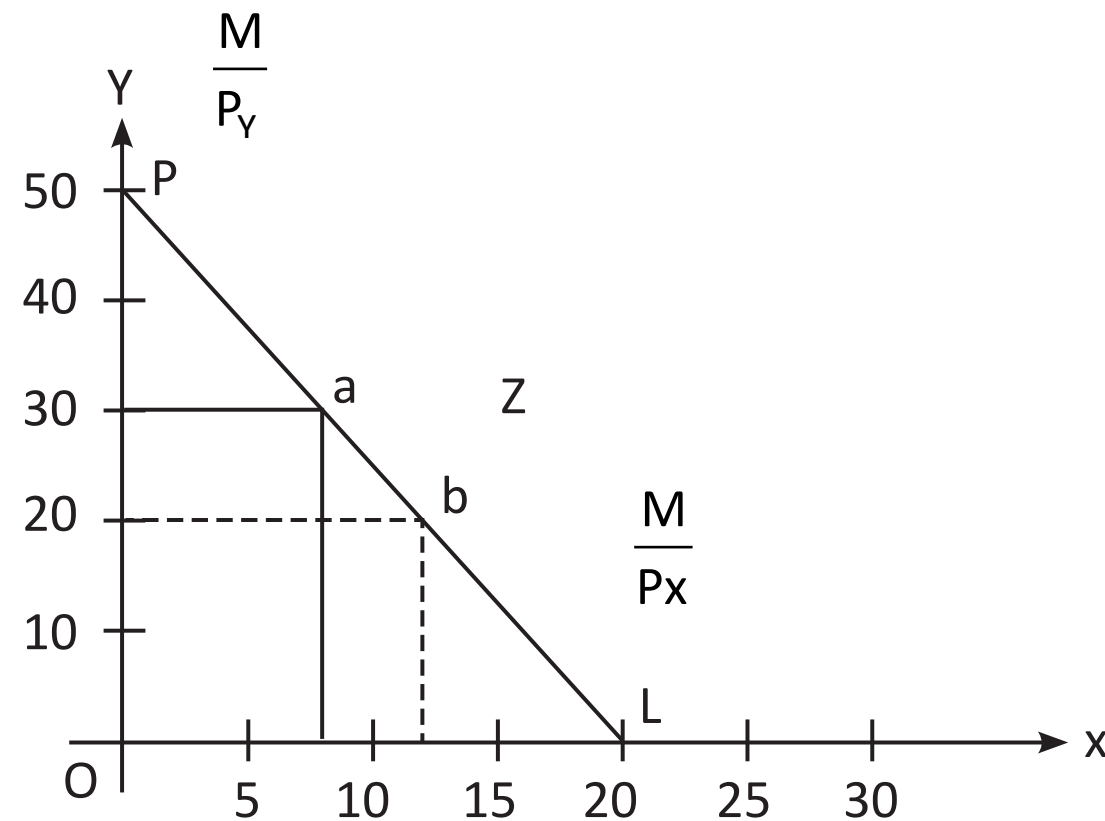
❖ **Budget Line Equation: $P_x.X + P_y.Y = M$**

5.7 Observations from Diagrammatic Representation of Budget Line

❖ **Attainable:** Points **on** or **inside** the budget line (within budget).

❖ **Unattainable:** Points **outside** the budget line (beyond budget).

❖ **Slope of Budget Line = Price Ratio or P_x/P_Y**

5.8 Causes of Shift in Budget Line

❖ Change Price of goods

❖ Change in income of the buyer

5.9 Consumer Equilibrium (under Ordinal Approach)

❖ **Meaning:** A consumer is in **equilibrium** when they **maximize satisfaction** within their **budget constraint**.

❖ **Tools Used: Indifference Map** and **Price/Budget Line**

❖ Consumer aims to reach the **highest** possible indifference curve.

❖ Consumer must stay on the budget line, which represents affordable combinations.

❖ **Equilibrium Point**: Reached when the budget line is tangent to the highest possible indifference curve (e.g., point C).
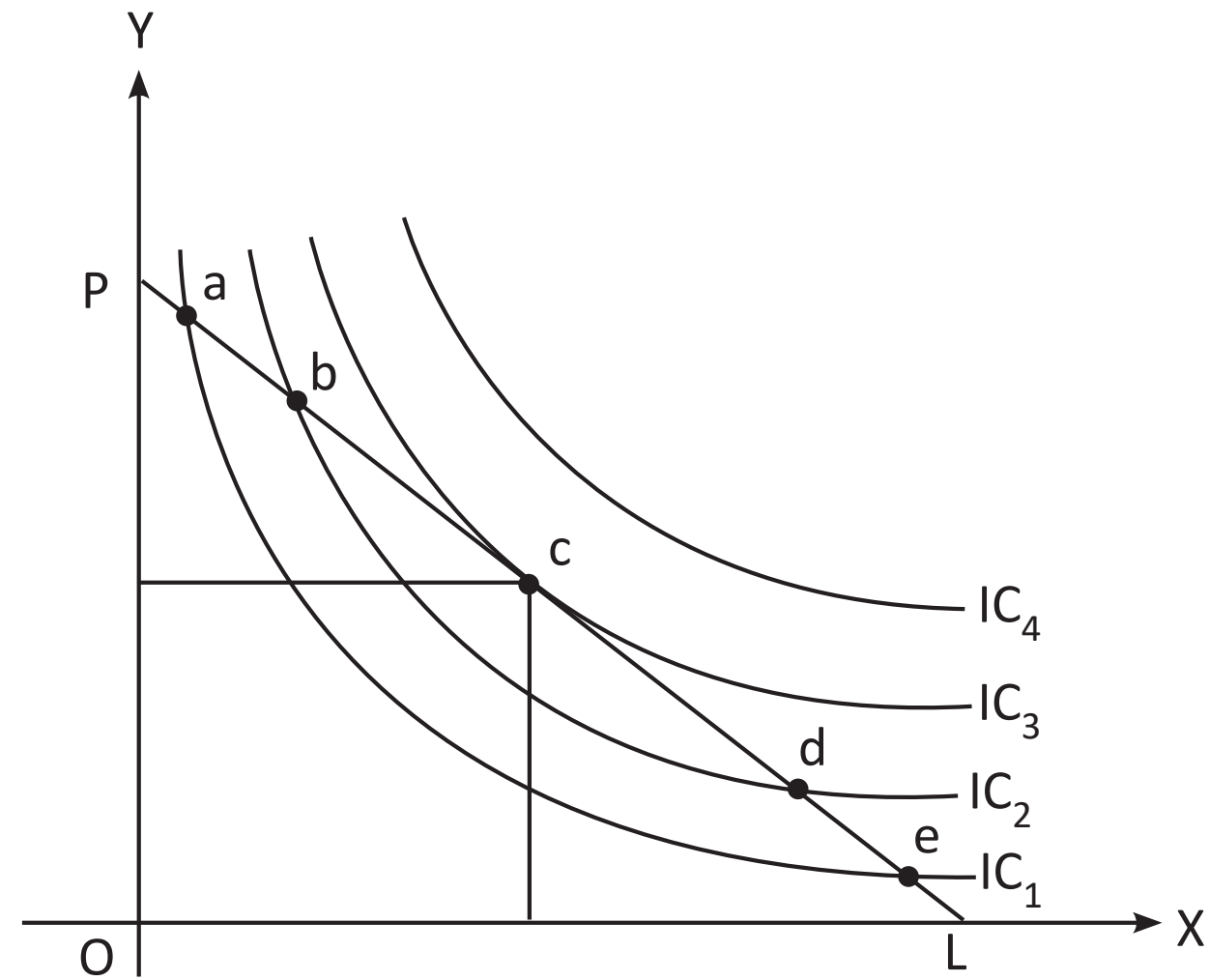
6. Advantages of Indifference Curve Analysis Over Utility Analysis

❖ No need for measurable utility
❖ Analyzes multiple commodities
❖ Doesn't assume constant marginal utility of money
❖ Separates income effect from substitution effect

3 Unit

SUPPLY

1. Supply

1.1 Meaning

- ❖ **Supply**: Refers to what a firm offers for sale, not necessarily what is sold. What is offered may not always get sold.
- ❖ **Supply is a Flow** (concept)

1.2 Determinants of Supply (ONE NSG PPP)

1. **Price of Own Good**:
   - ○ Price $\uparrow$ → Supply $\uparrow$ (Direct/positive relation)
   - ○ Price $\uparrow$ → Supply $\downarrow$
2. **Price of Related Goods**:
   - ○ Price of Y $\uparrow$ → Supply of X $\downarrow$
   - ○ Price of Y $\downarrow$ → Supply of X $\uparrow$
3. **Price of Factors of Production**:
   - ○ Input price $\uparrow$ → Production cost $\uparrow$ → Profit margin $\downarrow$ → Supply $\downarrow$

4. **State of Technology**:
○ Advanced tech → Cost ↓ → Profit ↑ → Supply ↑
○ Old tech → Expenses ↑ → Supply ↓
5. **Number of Sellers**:
○ Number of sellers ↑ → Supply ↑
6. **Expectations**:
○ Future price ↑ → Supply ↓ today
○ Future price ↓ → Supply ↑ today
7. **Government Policy**:
○ Tax ↑ → Supply ↓
○ Tax ↓ → Supply ↑
○ Subsidy ↑ → Supply ↑
○ Restrictions (Import Quota) → Supply ↓
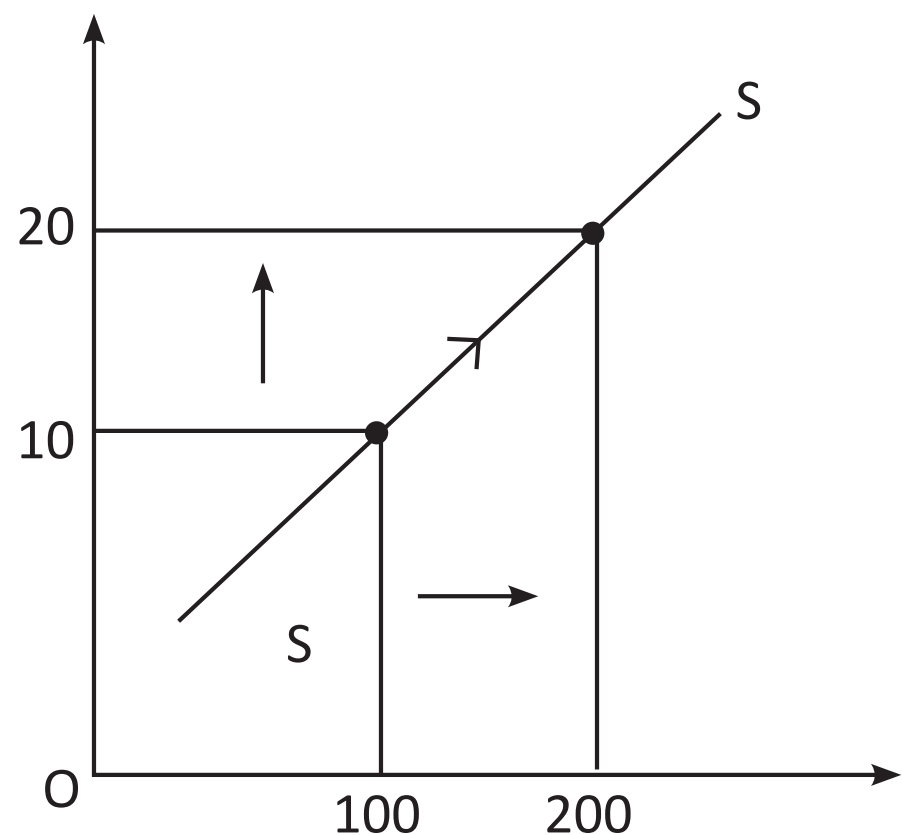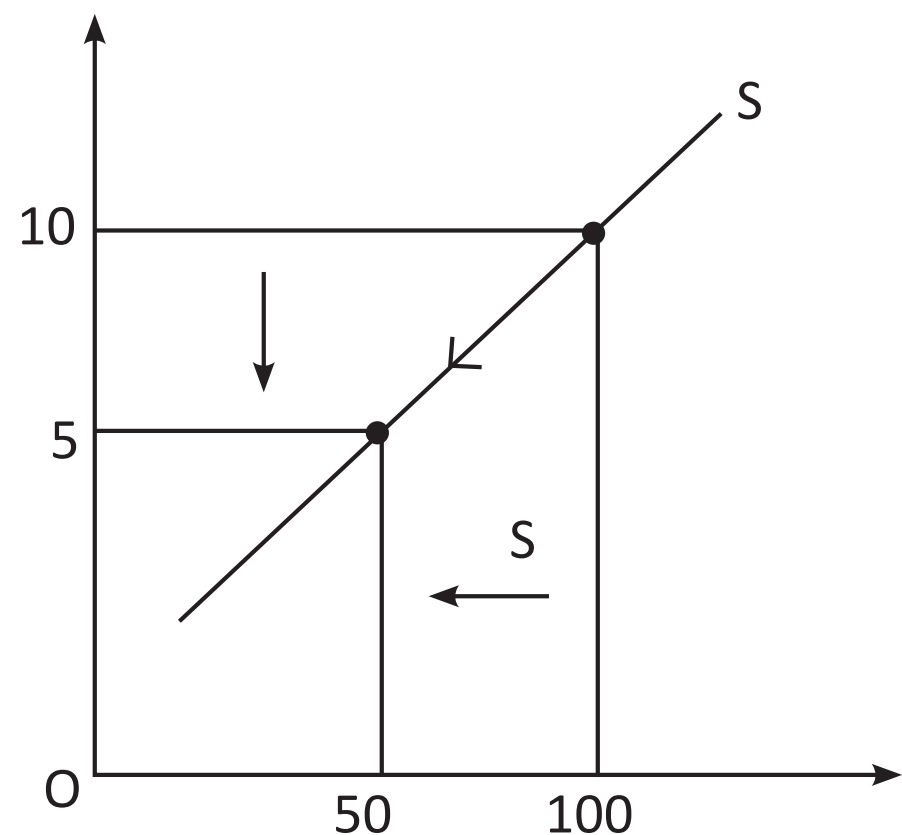
1.3 The Law of Supply

❖ **Price ↑ → Supply ↑ (Direct/Positive relation)** and **Price ↓ → Supply ↓**
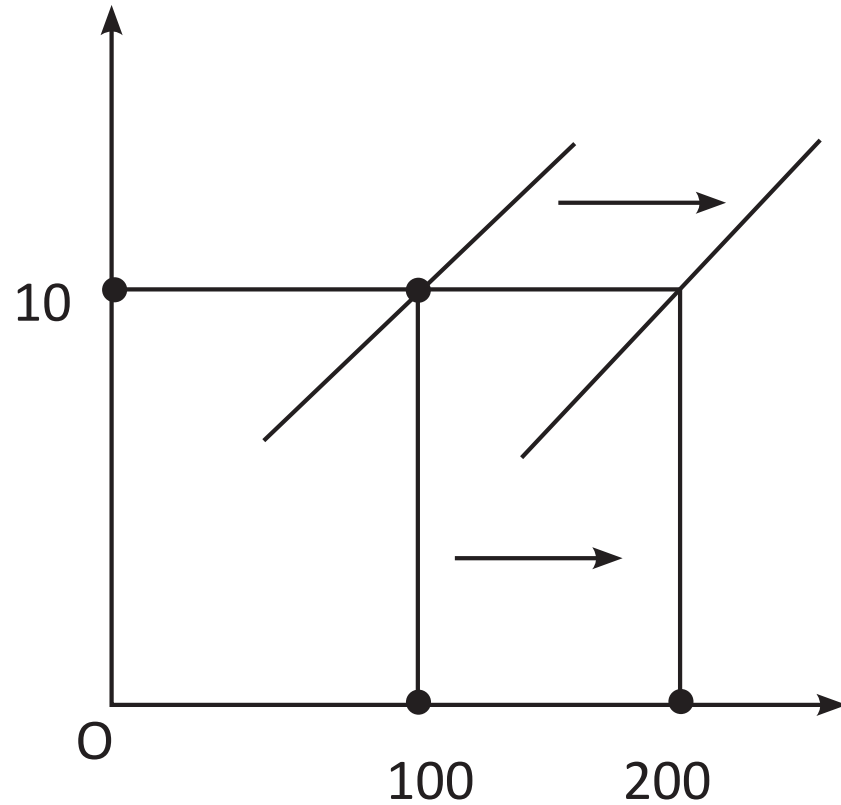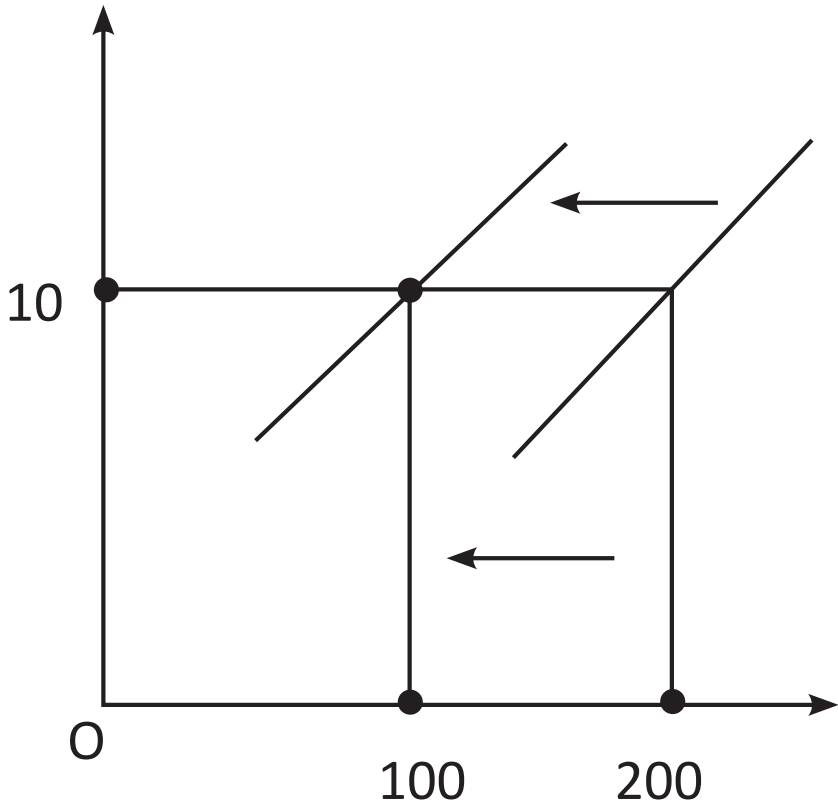
1.4 The Supply Curve

❖ Upward slopping or Positivity sloped

2. Expansion & Contraction of Supply- (Both are the Types of Movement Along Supply Curve)

Expansion of Supply or ↑ In Qty. Supplied	Contraction of Supply or ↓ In Qty. Supplied
❖ P=Price↑ S=Supply↑	❖ Price ↓ supply ↓
❖ Moves upward along the supply curve	❖ Moves downward along the supply curve

"Upward Movement"

"Downward Movement"

3. Increase and Decrease in Supply- (Both are the Types of Shift in Supply Curve)

Increase of Suply	Decrease of Supply
❖ Supply rises due to factors other than price (No. of Sellers, Govt. Policy, etc.)	❖ Supply falls due to factors other than price
❖ Rightward shift of supply curve	❖ Leftward shift of Supply curve
Rightward shift of supply curve	Leftward shift of supply curve

4. Elasticity of Supply

4.1 Meaning

- ❖ Measures responsiveness of supply to changes in price

- ❖ **Formula**: $E_s = \dfrac{\Delta Q}{\Delta P} \times \dfrac{P}{Q}$

4.2 Methods of Calculating Elasticity of Supply

Methods of Measuring Elasticity of Supply		
Percentage Method	Point Method	Arc Method
$E_s = \dfrac{\Delta Q}{\Delta P} \times \dfrac{P}{Q}$	$\dfrac{dQ}{dP} \times \dfrac{P}{Q}$	$\dfrac{Q_2 - Q_1}{Q_2 + Q_1} \times \dfrac{P_2 + P_1}{P_2 - P_1}$

4.3 Types/Degrees of Elasticity of Supply

1. Perfectly inelastic supply: $E_s = 0$

2. Perfectly elastic supply: $E_s = \infty$

3. Inelastic Supply ($0 < E_s < 1$)

4. Unitary Elastic Supply ($E_s = 1$)

5. Elastic Supply ($E_s > 1$)

4.4 Determinants of Elasticity of Supply

1	Increase in production $\rightarrow$ High cost rise $\rightarrow$ Profit decrease	× Inelastic Supply
	Increase in production $\rightarrow$ Negligible or constant cost rise	✓ Elastic Supply
	Complex production process (e.g., aircraft, cruise ship)	× Inelastic Supply
2	Short time after price increase	× Inelastic Supply
	Long time after price increase $\rightarrow$ New plants/firms	✓ Elastic Supply
3	More sellers $\rightarrow$ More competition $\rightarrow$ Fewer entry barriers	✓ Elastic Supply
4	IL Not working on full capacity $\rightarrow$ Spare capacity available	✓ Elastic Supply
5	Key raw materials $\rightarrow$ Easy & cheap	✓ Elastic Supply
	K Key raw materials $\rightarrow$ Hard to procure, costly	× Inelastic Supply
6	Easily stored raw materials & finished goods $\rightarrow$ Adequate stock	✓ Elastic Supply
7	Sellers expect future price rise	× Inelastic Supply
8	Inputs in short supply $\rightarrow$ Long delivery time $\rightarrow$ Specialized	× Inelastic Supply
9	Highly skilled labour $\rightarrow$ Scarce & long training required	× Inelastic Supply
10	Capital & labour $\rightarrow$ Occupationally mobile	✓ Elastic Supply
	Continuously produced products	✓ Elastic Supply
	Infrequently produced products	× Inelastic Supply

5. Equilibrium Price

❖ The price at which **demand = supply**, ensuring market equilibrium (like point E).

❖ **Other Names**: Also called **market equilibrium** or **market clearing price**.
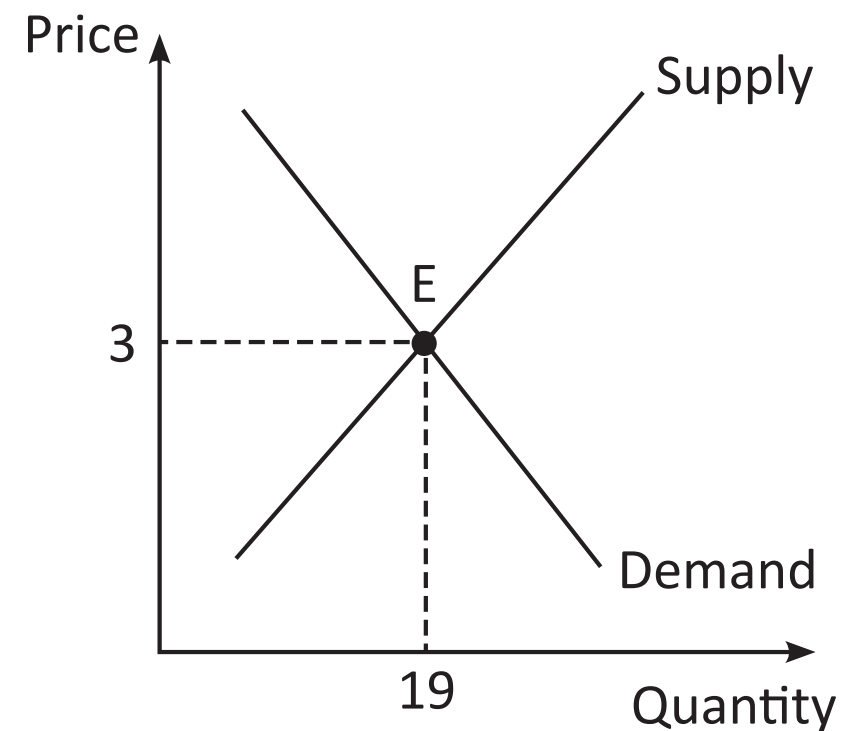
6. Market Equilibrium and Social Efficiency

❖ **Social Efficiency**: Net gains to society from all market exchanges.

❖ **Components**:

  1. **Consumer Surplus** (Measures consumer welfare.) &

  2. **Producer Surplus** (Benefit to producers from selling above production cost.

❖ **Producer Surplus Calculation Formula**: Area **above the supply curve** & **below market price**.

THEORY OF PRODUCTION AND COST

- **Unit 1: Theory of Production**
- **Unit 2: Theory of Cost**

1 Unit — THEORY OF PRODUCTION

1. Meaning of Production

1.1 Definition

❖ Production is the process of converting inputs into outputs to satisfy human needs.
❖ Production is an economic activity.
❖ According to **James Bates & J.R. Parkinson**: "Production is an organised activity that transforms resources into finished goods & services to satisfy demand."

1.2 Production Does NOT Include

❖ **Unpaid household work** done out of **love & affection**
❖ **Example**: Mom cooking food at home (Not considered production)

1.3 Utilities Created by Production

❖ **Place Utility**: Moving goods to where needed (e.g., apples from Kashmir).
❖ **Time Utility**: Storing goods for later use (e.g., canned fruits).
❖ **Form Utility**: Transforming raw materials into finished goods.
❖ **Personal Utility**: Providing services (e.g., CA, managers).

2. Factors of Production

```
                    ┌──────────────────────────┐
                    │  Factors of Production   │
                    └──────────────────────────┘
         ┌──────────────┬──────────┴──────────┬──────────────┐
   ┌──────────┐   ┌──────────┐         ┌──────────┐    ┌──────────────┐
   │   Land   │   │  Labour  │         │ Capital  │    │ Entrepreneur │
   └──────────┘   └──────────┘         └──────────┘    └──────────────┘
```

2.1 Land

```
                    ┌──────────────────────────┐
                    │        Includes          │
                    └──────────────────────────┘
      ┌───────────────────┬─────────┴─────────┬─────────────────┐
┌───────────────────┐ ┌──────────┐      ┌──────────┐   ┌──────────────┐
│ Natural Resources │ │   Soil   │      │  Water   │   │  Air & Light │
└───────────────────┘ └──────────┘      └──────────┘   └──────────────┘
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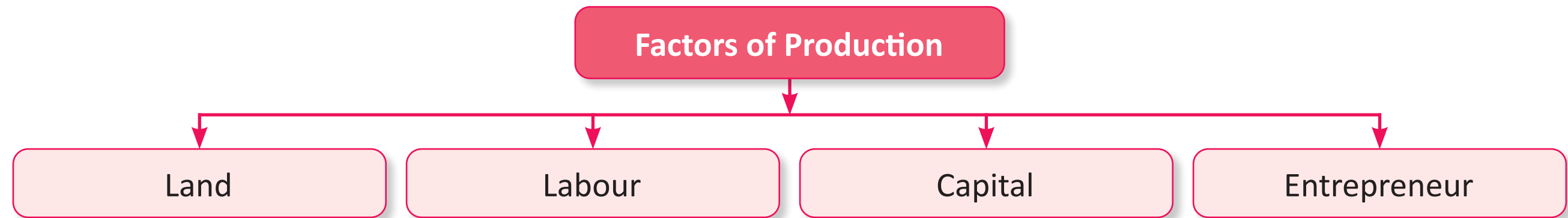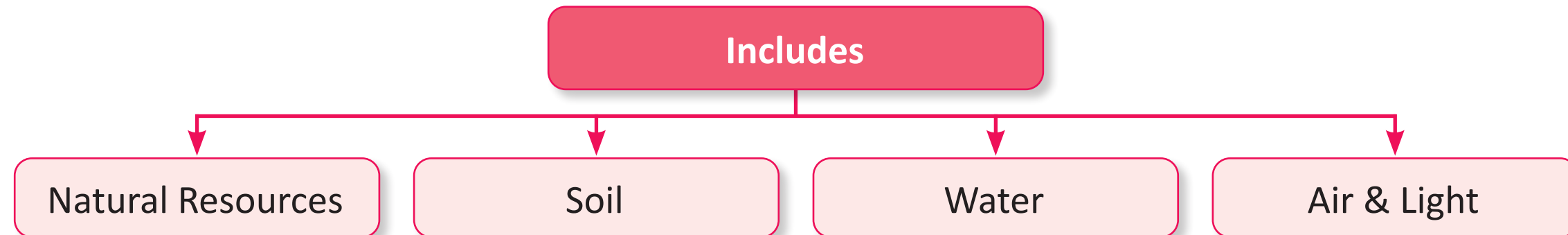
Characteristics:
(i) Land is a free gift of nature
(ii) Supply of land is fixed
(iii) Land is permanent and has indestructible power
(iv) Land is a passive factor
(v) Land is immobile

(vi) Land has multiple uses
(vii) Land is heterogeneous

Note:	Supply of Land is Perfectly Inelastic from overall Economy's Point of View.
	Land is relatively elastic from the point of view of a firm.

2.2 Labour

Characteristics:
1. Human Effort
2. Labour is perishable
3. Labour is an active factor
4. Labour is inseparable from the labour
5. Labour power differs from labourer to labourer
6. All labour may not be productive
7. Labour has poor bargaining power
8. Labour is mobile
9. Choice between hours of labour and hours of leisure
10. There is no rapid adjustment of supply of labour to the demand for it

Note:	Labour supply curve is backward bending

2.3 Capital

- ❖ Capital is Stock of resources used to produce goods.
- ❖ **Types**:
  1. **Fixed Capital:** Long-term assets like machinery.
  2. **Circulating Capital:** Used in one production cycle (e.g., raw materials).
  3. **Real Capital:** Physical assets.
  4. **Human Capital:** Skills and expertise.
  5. **Tangible vs. Intangible Capital:** Physical assets vs. non-physical (goodwill, patents).
  6. **Individual Capital**: Personal assets owned by individuals.
  7. **Social Capital**: Publicly owned resources like roads and bridges that benefit society.

- ❖ **Capital Formation:**
  - ○ Process of increasing real capital stock.
  - ○ Also called investment
  - ○ **Stages of Capital Formation**
  1. Savings
  2. Mobilization of Savings
  3. Investment

2.4 Entrepreneur

❖ Mobilizes the other factors, combines them in the right proportions, and initiates the production process.

❖ Responsible for bearing the risks

❖ **Functions**

1. Initiating business enterprise and resource coordination

2. Risk-bearing

3. Innovation - most important function

❖ **Objectives of Enterprises**

○ **Organic Objectives** - Survive and Exist

○ **Economic Objectives** - Profit Maximization

○ **Social Objectives** - Quality Goods, Employment, Ethical Practices

○ **Human Objectives** - Employee Welfare, Skill Development, Job Satisfaction

○ **National Objectives** - Reducing Inequality, Self-Reliance, Skill Growth

2.5 Constraints of an enterprise in achievement of its Objectives

- ❖ Lack of Knowledge
- ❖ Government Restrictions
- ❖ Infrastructure Issues
- ❖ Changing Conditions
- ❖ Economic Factors

2.6 Enterprise Problems

- ❖ Objective-related issues
- ❖ Location & plant size problems
- ❖ Organizing physical facilities
- ❖ Financial constraints
- ❖ Marketing challenges

3. Production Function

- ❖ A production function represents the technical relationship between inputs and output.

3.1 Short-Run Production Function

- ❖ **At least one factor is fixed**
- ❖ **Capital is fixed**, while **labour vary**
- ❖ Based on **Law of Variable Proportions**

- ❖ **Total Product (TP)** - Total output produced per unit of time.

- ❖ **Average Product (AP) =** $\dfrac{TP}{L}$

- ❖ **Marginal Product (MP) =** $\dfrac{\Delta TP}{\Delta L}$

- ❖ **or Marginal Product (MP)** $= TP_n - TP_{n-1}$
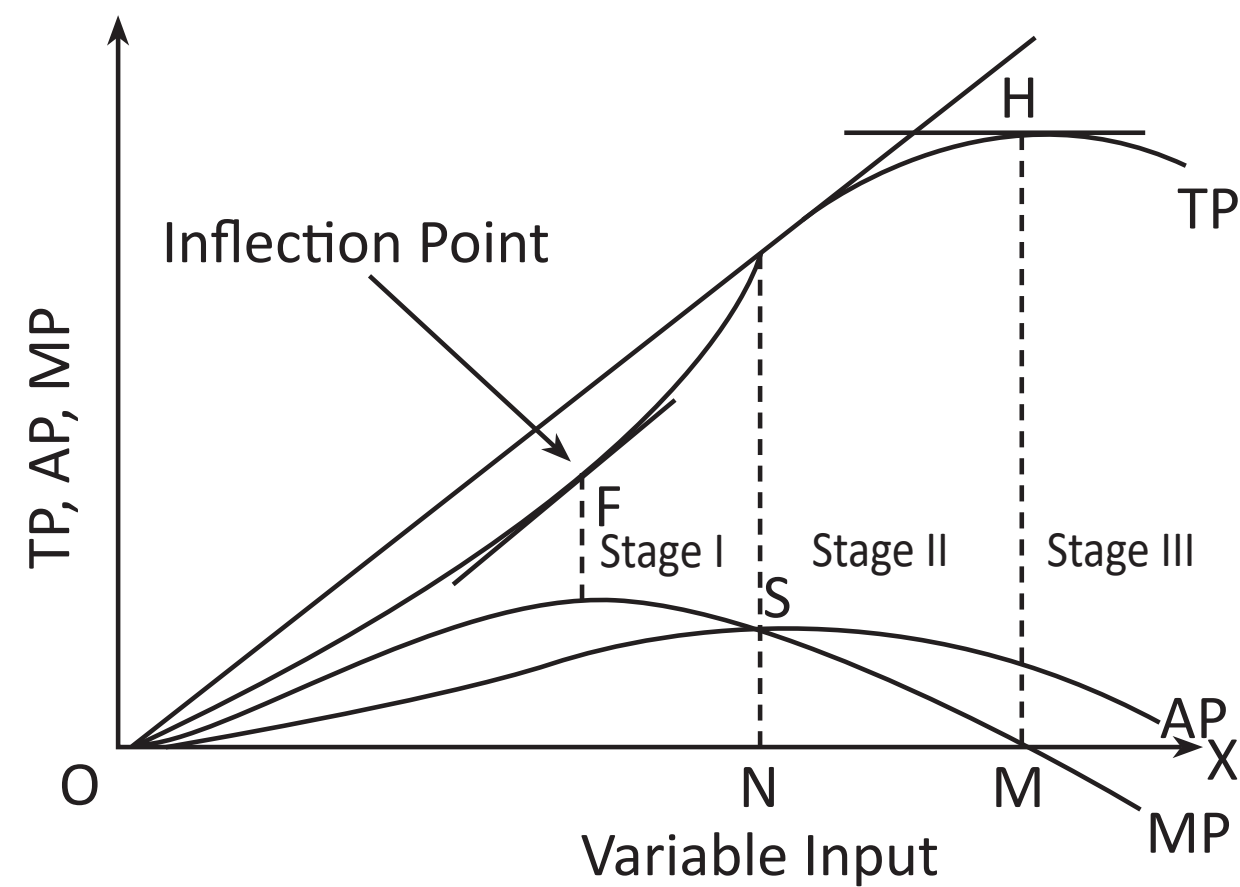
3.2 Three Stages of Production

STAGE	TP	MP	AP
Stage I	Increases at an increasing rate, increases at an diminishing rate	Increases and reaches at maximum point.	Increases and reaches its maximum point.
Stage II	Increases at diminishing rate and reaches its maximum point	Decreases and becomes zero	After reaching its maximum point beings to decreases
Stage III	Begins to fall.	Becomes Negative	Continues to diminish

3.3 Relationship Between AP & MP
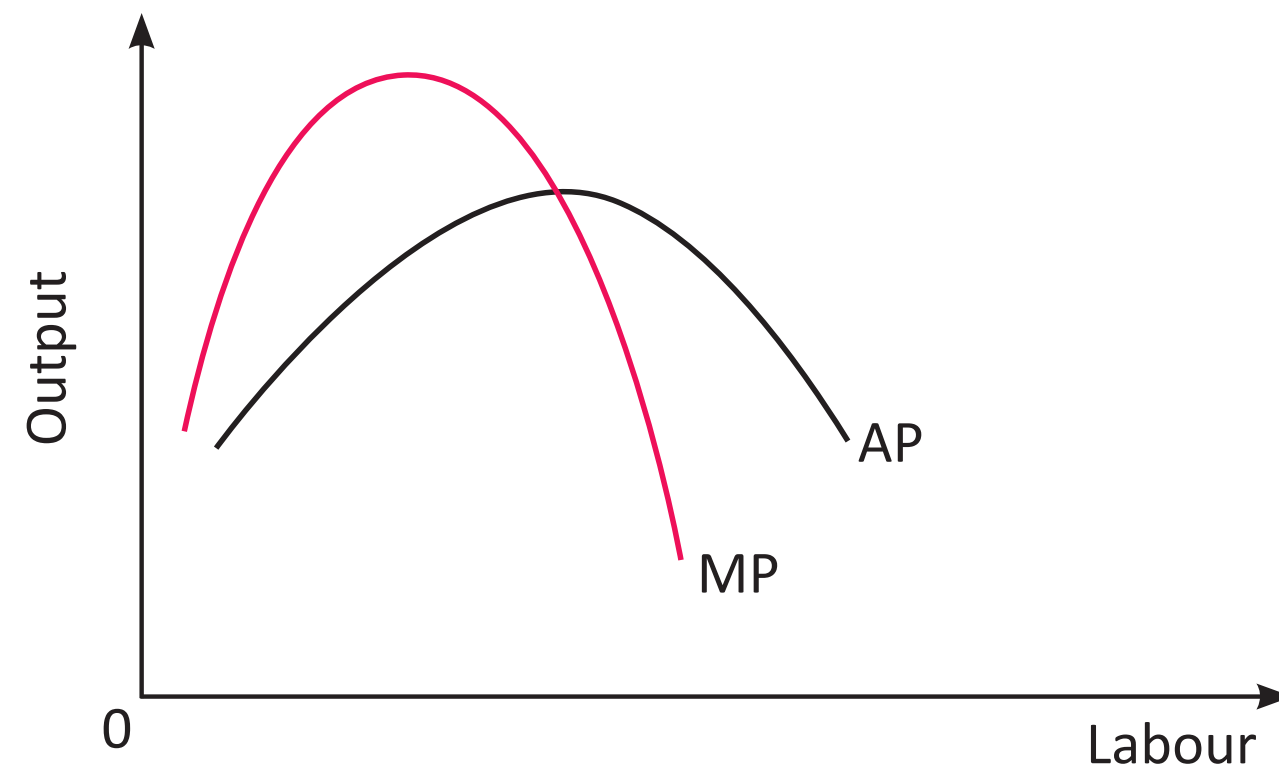
Relationship Between AP & MP

- When AP rises, MP > AP.
- When AP is at its maximum, MP = AP.
- When AP falls, MP < AP.

3.4 Long-Run Production Function

❖ **All factors of production are variable**
❖ **Shows maximum output** when all inputs vary
❖ Based on **Law of Returns to Scale**

3.5 Returns to Scale

❖ **Increasing Returns to Scale** → % Output rises more than % Input increase.
❖ **Constant Returns to Scale** → % Output rises in the same proportion as % Input.
❖ **Diminishing Returns to Scale** → % Output rises less than % Input increase.

3.6 Cobb-Douglas Production Function

❖ **Developed by** C.W. Cobb & Paul H. Douglas
❖ **Applies to entire manufacturing industry**, not just firms
❖ **Inputs:** Labour (L) & Capital (C)
❖ **Formula:** $Q = KL^a C^{(1-a)}$ (old), $Q = KL^a C^b$ (new)

3.7 Understanding Returns to Scale through Cobb-Douglas Production Function

❖ If a + b > 1 → Increasing returns to scale.
❖ If a + b = 1 → Constant returns to scale.
❖ If a + b < 1 → Decreasing returns to scale.

4. Production Optimisation

4.1 Isoquants

❖ **Also known as** Equal-production curves, production indifference curves or iso-product curves.
❖ It shows all combinations of inputs that can produce the same level of output.
❖ **Properties:**
○ Downward Sloping.
○ Convex to the origin due to diminishing MRTS.
○ Higher Isoquant = Higher Output.
○ Two isoquants never intersect.

4.2 Isocost Line

❖ **Also known as** Equal-Cost Line or budget line or budget constraint line.
❖ It shows various alternative combinations of two factors which the firm can buy with given outlay.

4.3 Production Optimisation

○ Achieved where isocost is tangent to isoquant i.e. (Slope of Isoquant = MRTS).

THEORY OF COST
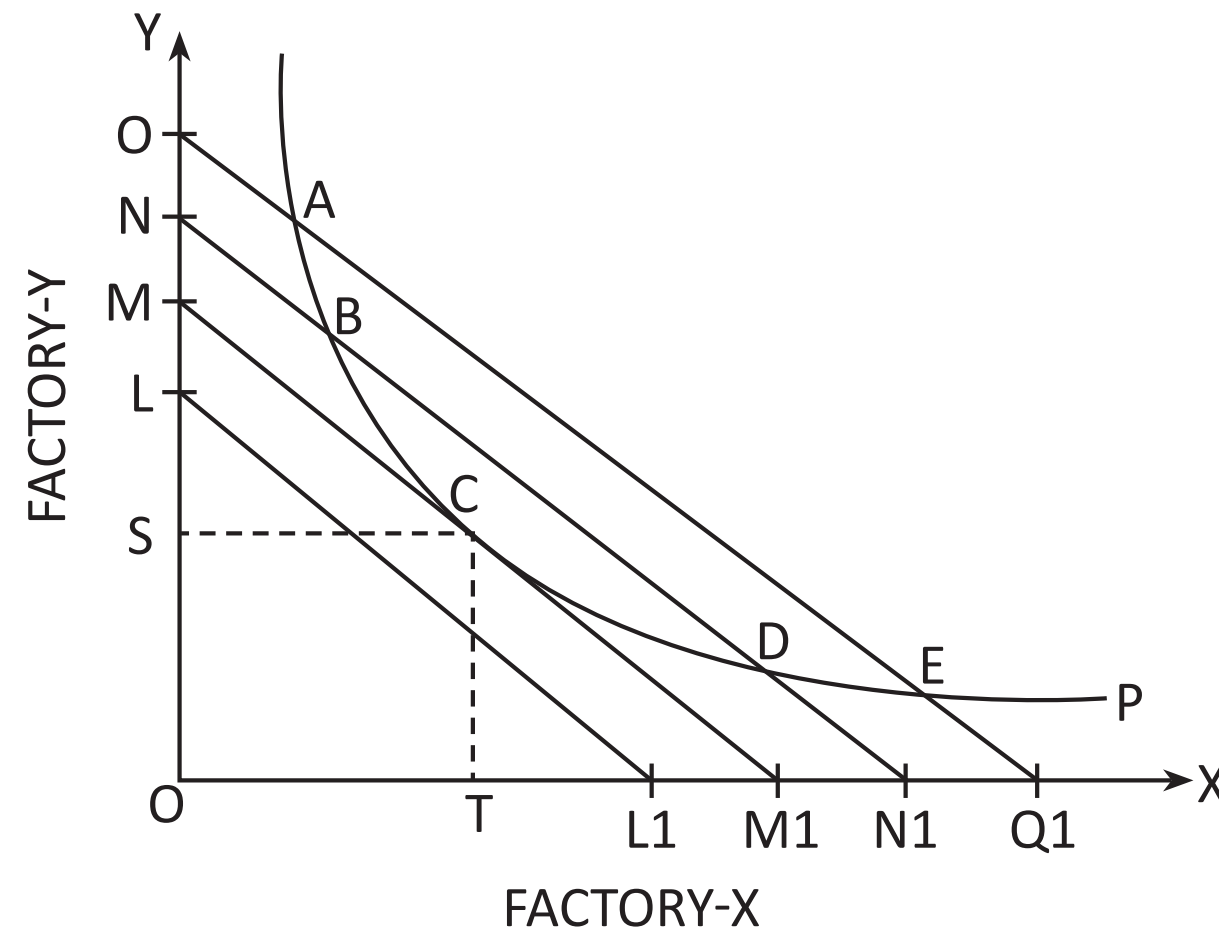
1. Cost Concepts

1.1 Accounting Costs & Economic Costs

❖ **Accounting Costs** = **Explicit Costs** (Outlay costs) → Actual expenses recorded in books.
❖ **Implicit Cost** → Cost of using self-owned resources (e.g., normal/expected return on owner's capital).
❖ **Economic Cost** = **Explicit Cost + Implicit Cost**
❖ Implicit Cost includes Normal Profit

1.2 Incremental Costs and Sunk Costs

❖ **Incremental Cost** → Extra cost due to a business decision (Similar to Marginal Cost).
❖ **Sunk Cost** → Irrecoverable past expenses (e.g., advertising, R&D).

1.3 Fixed and Variable Costs

❖ **Fixed Costs:** Do not vary with output (e.g., rent, interest).
❖ **Variable Costs:** Change with output (e.g., wages, raw materials).

1.4 Semi-Variable Costs

○ Partly fixed, partly variable (e.g., electricity).

1.5 Stair-Step Variable Cost

○ Remain constant over a range but jump to a higher level when output exceeds a limit.

A Stair-step Variable Cost

(Graph: Y-axis labelled "Total Variable Cost", X-axis labelled "Output", with steps numbered 1, 2, 3, 4 rising to the right, curve labelled VC, origin O.)
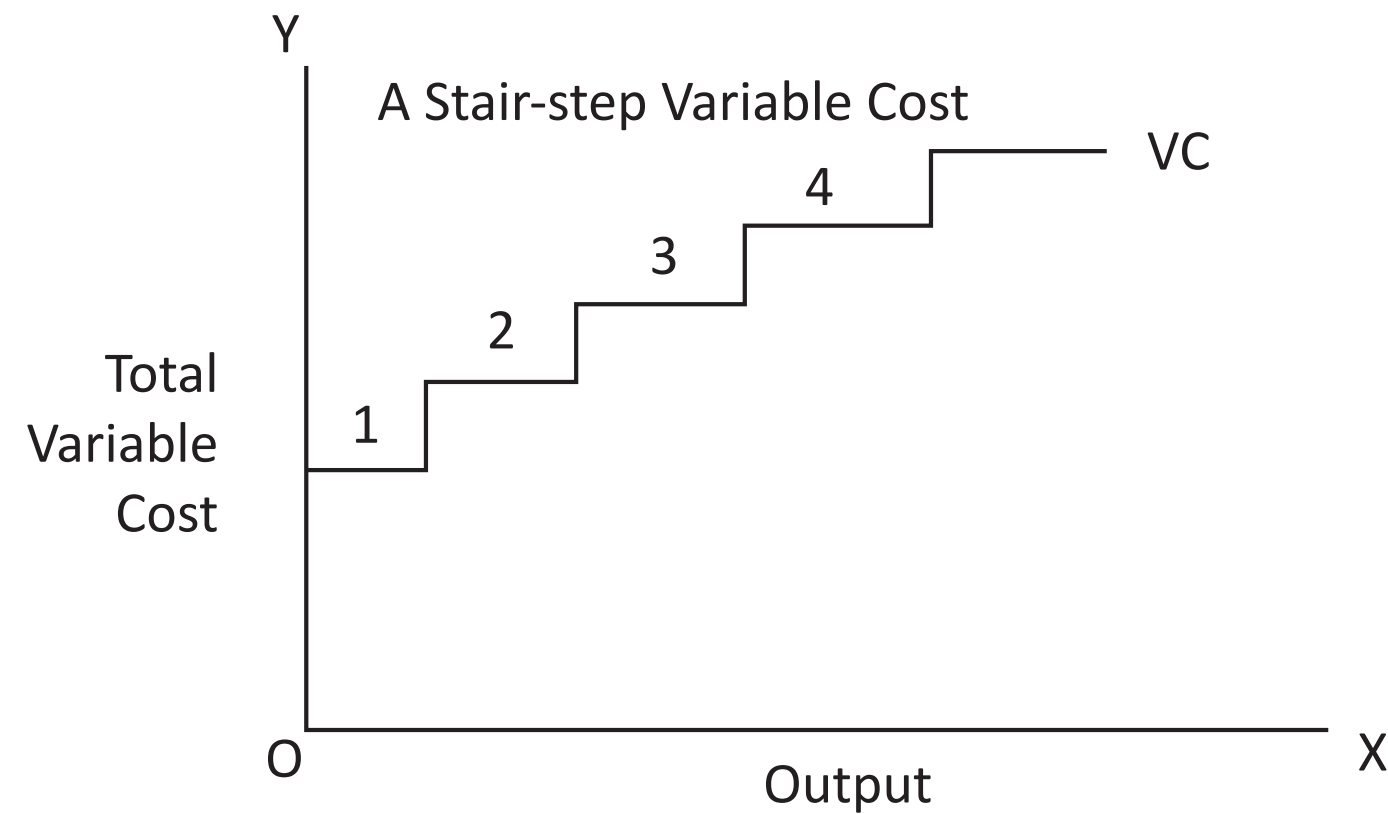
1.6 Private vs. Social Costs

❖ **Private Cost** → Costs borne by firms (Explicit + Implicit).

❖ **Social Cost** → Total cost to society = **Private Cost + External Cost** (e.g., pollution, health impacts).

2. Short Run Total Costs

2.1 Total Cost (TC)

- ○ Total Fixed Cost (TFC) + Total Variable Cost (TVC) or TC = TFC + TVC

2.2 Total Fixed Cost (TFC)

- ○ Constant at all output levels.

2.3 Total Variable Cost (TVC)

- ○ Increases as output rises.
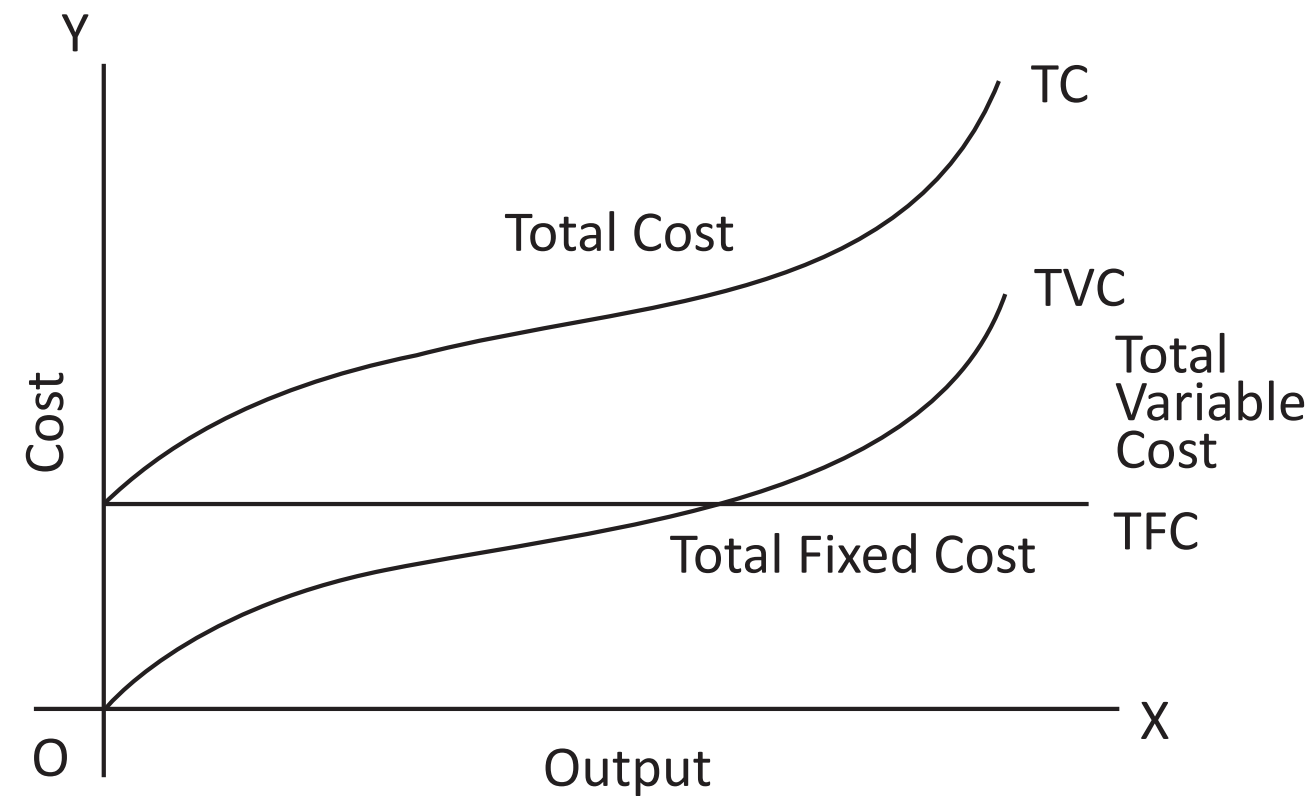
Short run Total Cost Curve

2.4 Average Costs

- ❖ AFC = $\dfrac{TFC}{Q}$: Always declines , rectangular hyperbola

- ❖ AVC = $\dfrac{TVC}{Q}$: U-shaped curve

- ❖ ATC = $\dfrac{TC}{Q}$ = AFC + AVC: U-shaped.

2.5 Marginal Cost (MC)

- ❖ Change in total cost for one more unit produced.

- ❖ MC = $\dfrac{\Delta TC}{\Delta Q}$

- ❖ MC = $\dfrac{\Delta TVC}{\Delta Q}$

- ❖ U-shaped, intersects ATC and AVC at their minimum points.
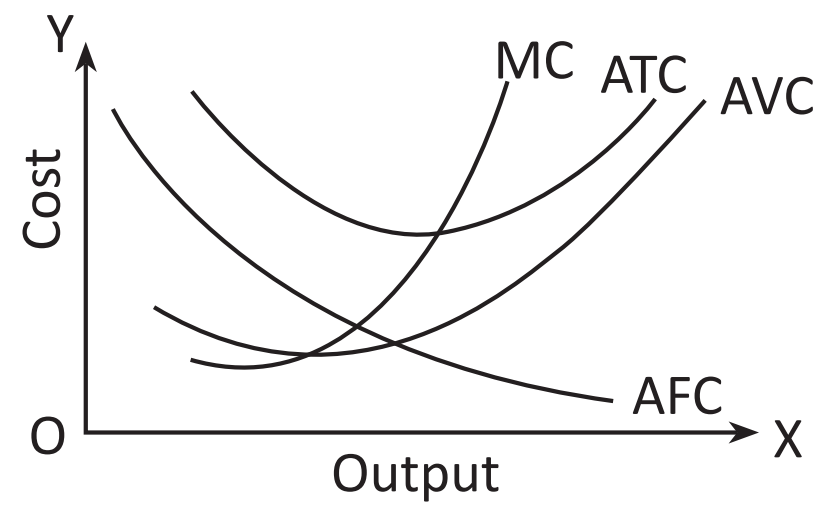
Short run Average and Marginal Cost Curves

2.6 Relationship Between

MC & AC	MC & AVC
AC Falls → MC < AC	AVC Falls → MC < AVC
AC Rises → MC > AC	AVC Rises → MC > AVC
AC Min. → MC = AC	AVC Min. → MC = AVC

MC and AC
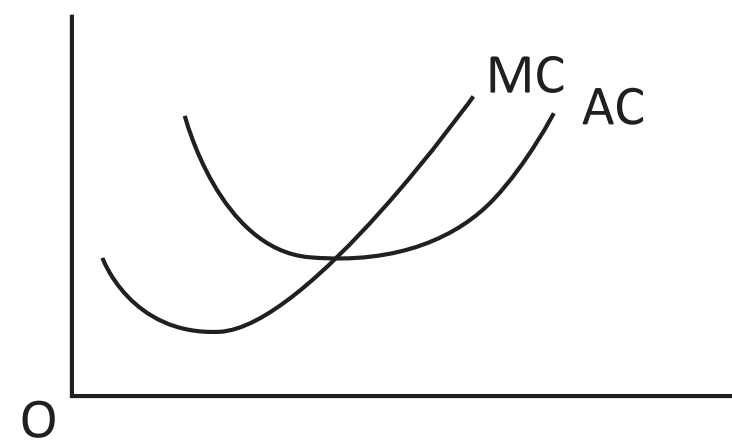
MC and AVC
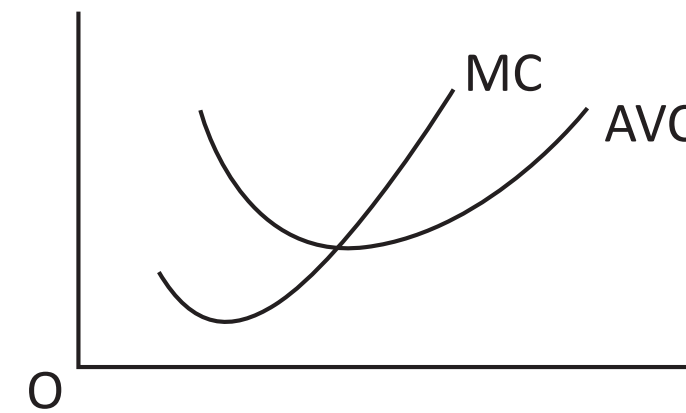
MC Curve cuts both AC and AVC at there minimum Point.

3. Long Run Average Cost Curve

3.1

❖ **LAC is U-shaped** → Due to the **Law of Returns to Scale**.
❖ **Firm can change plant size** → Moves between different short-run cost curves.
❖ **Long Run = Planning Horizon** → Firms plan for the long run but operate in the short run.
❖ **LAC shows the lowest cost** of producing any output level with all inputs variable.

3.2 When LAC is Falling (–ve Slope)

❖ LAC is tangent to falling → SAC Under-utilization
❖ Due to Increasing Returns to Scale (IRS) → Economies of Scale

3.3 When LAC is Rising (+ve Slope)

❖ LAC is tangent to rising SAC → Over-utilization
❖ Due to Decreasing Returns to Scale (DRS) → Diseconomies of Scale

4. Economies of Scale

❍ **Economies of Scale**: Cost advantages due to larger production.
❍ **Diseconomies of Scale**: Rising costs due to inefficiencies.

4.1 Economies of Scale

1. Internal Economies (Firm-specific):

- ○   Technical: Better machinery

- ○   Managerial: Specialization

- ○   Financial: Easier access to credit

- ○   Commercial: Bulk buying

- ○   Risk-bearing: Market stability

2. External Economies (Industry-wide):

- ○   Lower input costs, skilled labor, better infrastructure.

4.2 Diseconomies of Scale

- ❖ Internal Diseconomies: Poor management, inefficiency.

- ❖ External Diseconomies: Increased competition, resource shortages.

Cost Formulae Summary

	Cost	
$TC = TFC + TVC$ $= AC \times Q$ $TVC = TC - TFC$ $= AVC \times Q$ $= \Sigma MC$ $TFC = TC - TVC$ $= AFC \times Q$	$AC = AFC + AVC$ $= \dfrac{TC}{Q}$ $AVC = AC - AFC$ $= \dfrac{TVC}{Q}$ $AFC = AC - AVC$ $= \dfrac{TFC}{Q}$	$MC = TC_n - TC_{n-1}$ $= \dfrac{\Delta TC}{\Delta Q}$ $= TVC_n - TVC_{n-1}$ $= \dfrac{\Delta TVC}{\Delta Q}$

PRICE DETERMINATION IN DIFFERENT MARKETS

- **Unit 1:** Meaning and Types of Markets
- **Unit 2:** Determination of Prices
- **Unit 3:** Price Output Determination under Different Market Forms

1 Unit — MEANING AND TYPES OF MARKET

1. Meaning of Market

1.1 Definition

❖ **"Markets are Collection and Buyers and Sellers with Potential to trade."**
❖ The **elements** of a market are:
(i) Buyers and sellers;
(ii) A product or service;
(iii) Bargaining for a price;
(iv) Knowledge about market conditions; and
(v) One price for a product or service at a given time.

1.2 Classification

❖ Classification of markets is made based on:

1. General
2. Geographical Area
3. Time
4. Nature of transaction
5. Regulation
6. Volume of business
7. Type of Competition

CLASSIFICATION OF MARKET

General Classification

Product Market
House holds buys goods/ service from the firm

Factor Market
House holds buys goods/ service from the firm

Basis Area

Local Market
Highly purchasable/ bulky goods

Regional Markets
Large market size with caried demand characteristics

National Markets
Goods whose trading is restricted to the country

International
Markets high value & small bulk commodities e.g. gold

Basis-Transactions

Spot/Cash Market
Goods are exchanged for money payable immediately on short time span

Forward/future Market
Contract with promise to pay & deliver goods at some further date

Basis-Time

Very Short Period Market
Supply is fixed

Short Period Market
Firms buy res resources to produce goods/ services

Long Period Market
Supply can be fully adjusted

Very Long Period Market
Secular movement are recorded

CLASSIFICATION OF MARKET

Basis-Regulations

Regulated Market
Statutorily regulated to curb unfair practices

Unregulated Market
Free market with no stipulation on transactions

Basis of Volume Business

Whole Sale Market
Commodities are bought and sold in bulk

Retail Market
Commodities are sold in small quantities

Basis-Competition

Perfectly Competitive Market

Imperfectly Competitive Market

2. Types of Market Structure

	Market Types				
	Basis of difference	Perfect Competition	Monopolistic Competition	Oligopoly	Monopoly
1.	No. of Sellers	Very large	Large	Small No.	One
2.	Product Differentiation	None	Slight	None to Substantial	Extreme
3.	Price Elasticity of Demand of a Firm	Infinite	Large	Small	Small
4.	Degree of Control over price	None	Some	Some	Very Considerable

3. Concept of TR, AR, MR

3.1

Total Revenue: TR = P × Q
Average Revenue: $AR = \dfrac{TR}{Q}$
Marginal Revenue: $MR = \dfrac{\Delta TR}{\Delta Q}$ or $MR_n = TR_n - TR_{n-1}$

MR keeps falling, becomes 0 & after that becomes negative.

In case of constant AR, AR = MR

Y

Revenue

AR = MR

O ——————————————— X
Quality
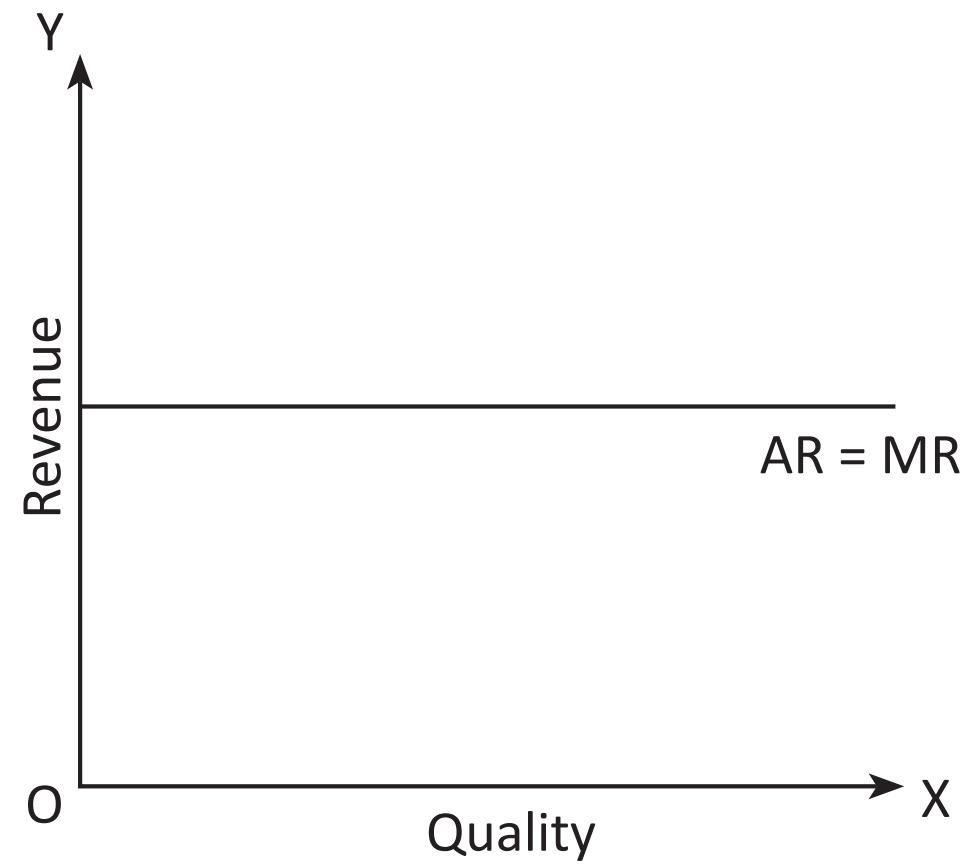
3.2 Relationship Between TR, AR, MR & Price Elasticity of Demand

○ Formula: $MR = AR \times \dfrac{e-1}{e}$
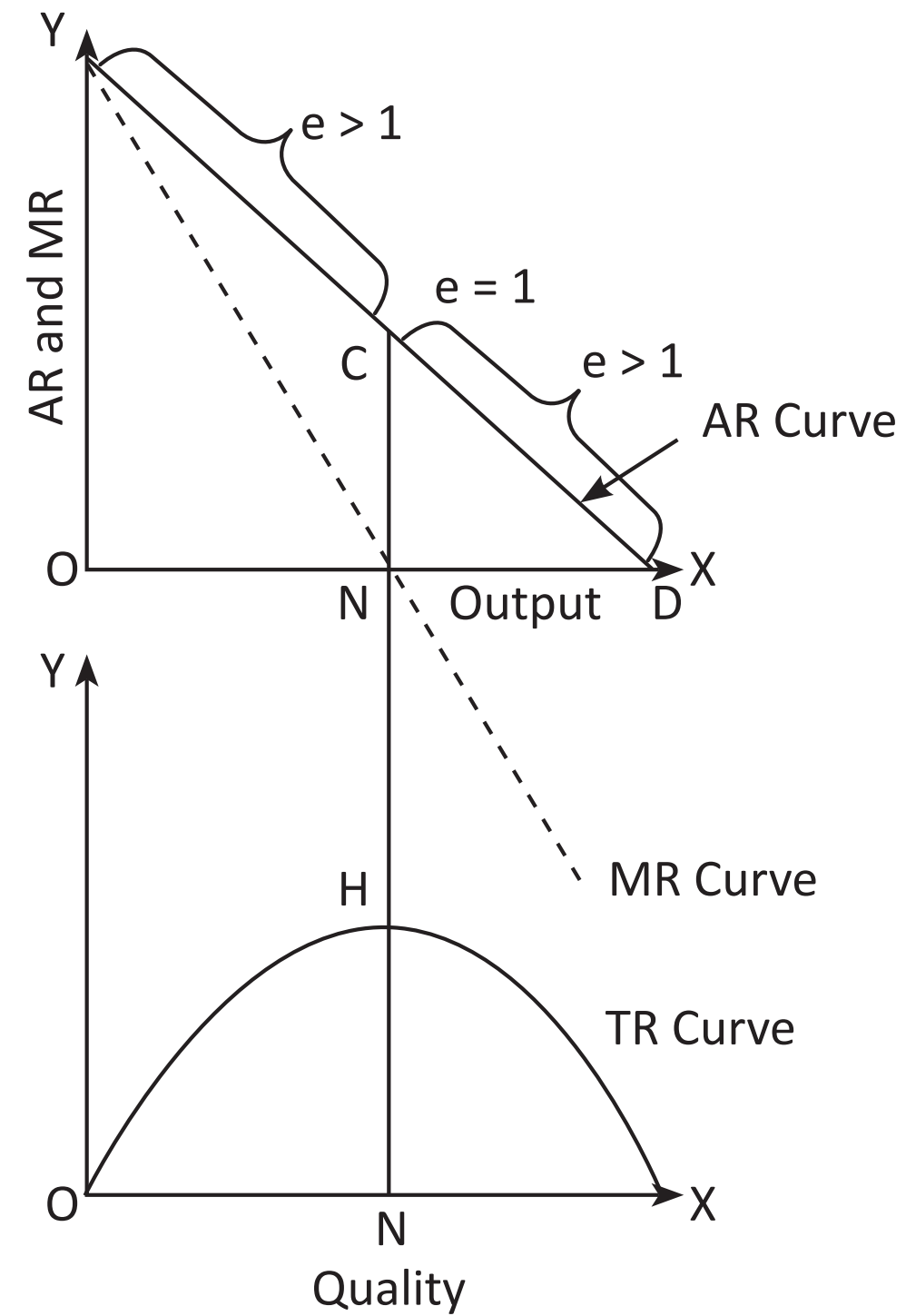
3.3 Behavioural Principles

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

❖ A firm (competitive) should shut down if price< AVC.

ATC > AR > min. AVC	P = min. ATC	P > ATC
Covers it variable Cost and some but not all of its fixed costs	Covers both fixed and variable cost, earns normal/0 economic profit	Covers full cost, earns +ve economic & super normal profit

❖ **Principle 2 - The firm will be making maximum profits by expanding output to the level where MR = MC.**

❖ It will pay firm to produce additional units of output, MR > MC, i.e. additional units add more to revenue than cost.

- ❖ Interaction of demand and supply generally sets prices in free market.

- ❖ Prices are sometimes fully or partially controlled by the government.

1. Determination of Prices: General View

1.1 Equilibrium in a Competitive Market

1. **Price Determination –** Demand and supply interaction sets equilibrium price and quantity.

2. **Meaning of Equilibrium –** A state where quantity demanded equals quantity supplied.

3. **Equilibrium Price/Market Clearing Price** – The price at which demand and supply balance, ensuring no unsold stock or unmet demand.

4. If the market price > equilibrium price, supply > demand, creating a surplus.

5. If the market price < equilibrium price, demand > supply, creating a shortage.
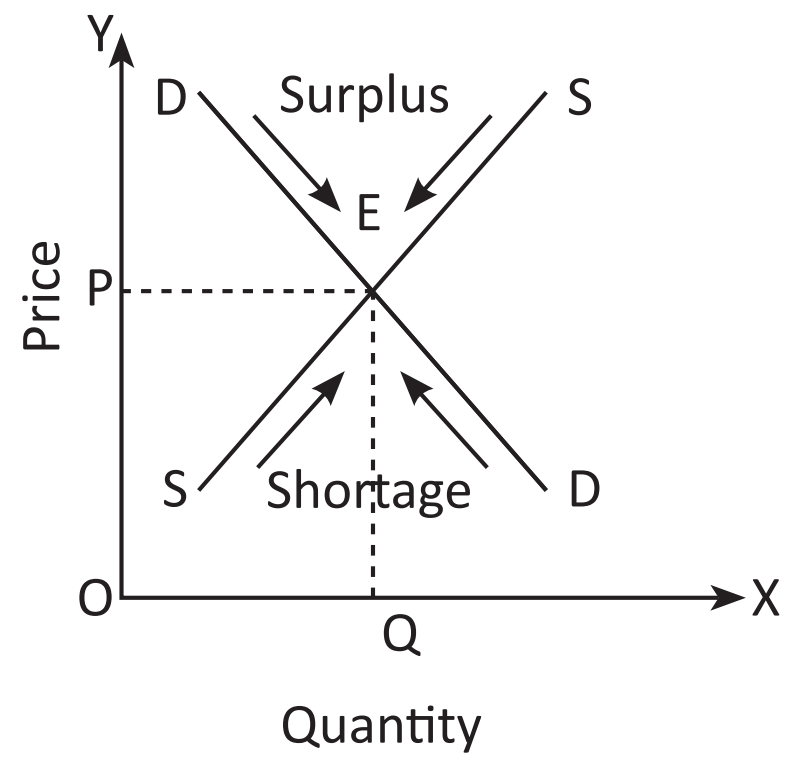
1.2 Changes in Demand & Supply

1. An increase (shift to the right) in demand:
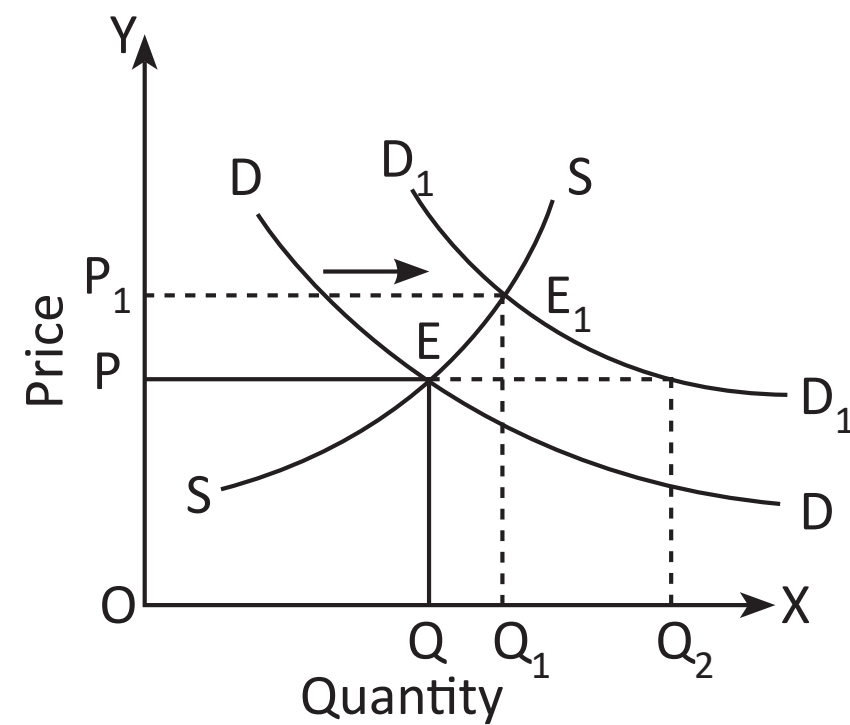
Inc. in demand: Qd P E_1
The Price of $E_1 > E$
Rightward shift

2. A decrease (shift to the left) in demand:
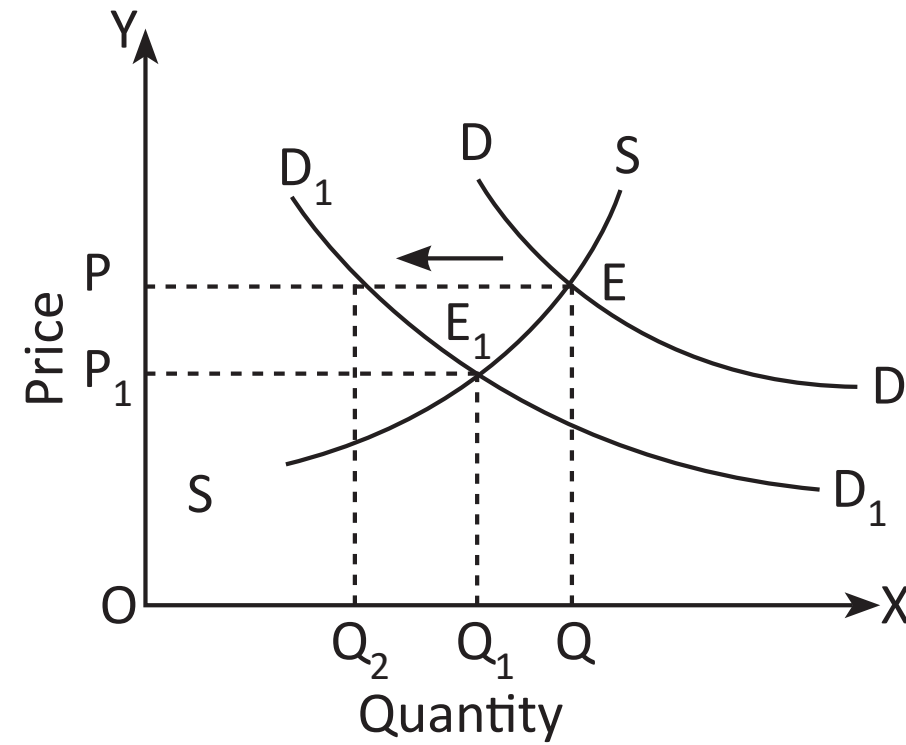
Dec. in demand: Qd   P E_1
The Price of E_1 > E
Leftward shift

3. An increase (shift to the right) in supply:
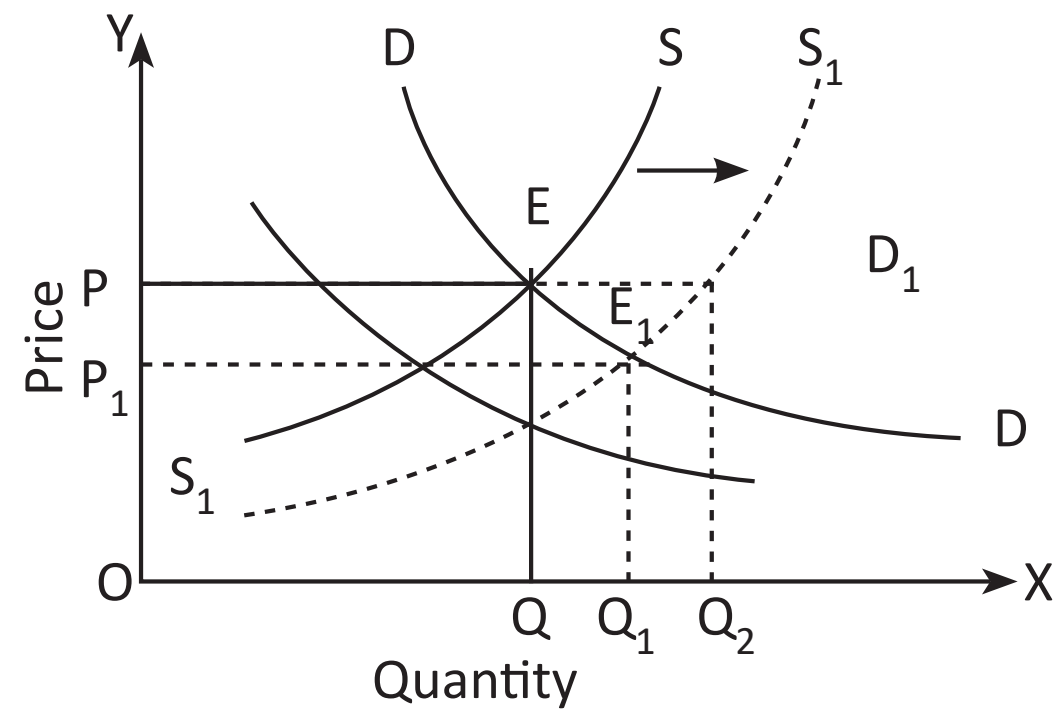
Inc. in supply: Qs   P E_1
The Price of E_1 > E
Rightward shift

4. A decrease (shift to the left) in supply:
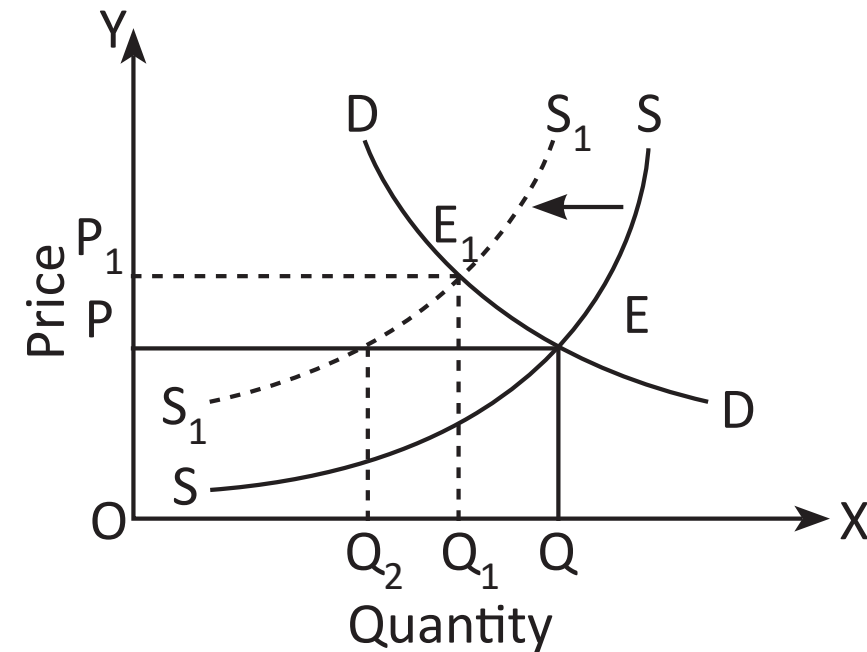
Dec. in demand: Qs   P E_1
The Price of $E_1 > E$
Leftward shift

1.3 Simultaneous Changes in Demand & Supply

- When demand and supply change at the same time:
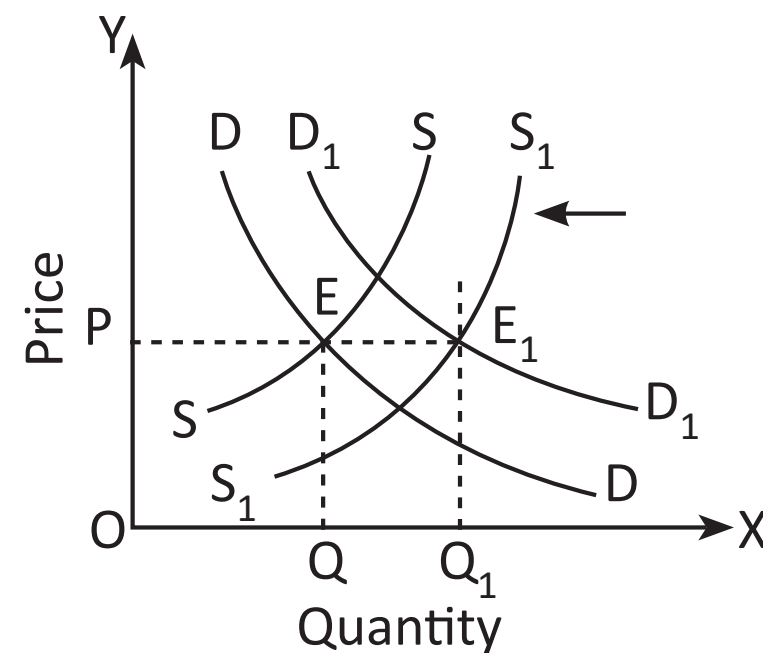
Increase in demand = Increase in Supply
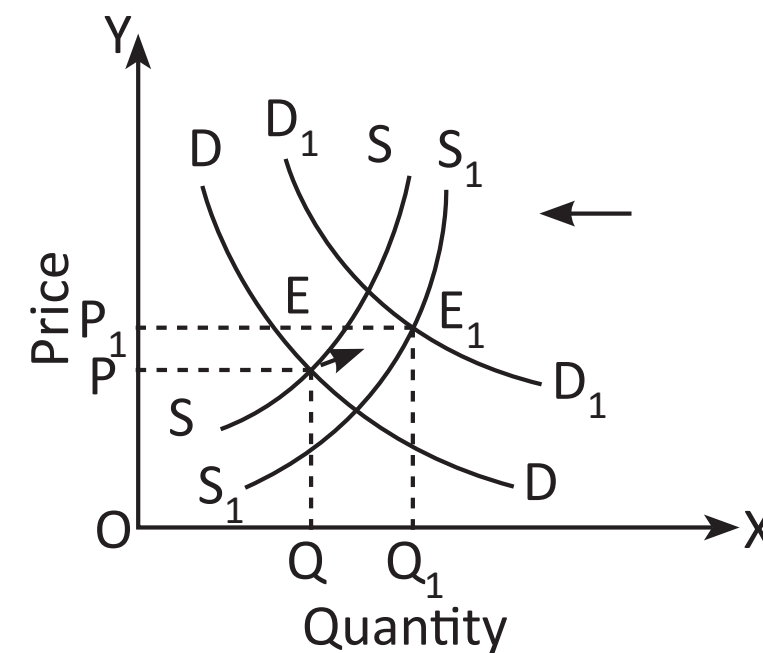
Increase in demand > Increase in Supply
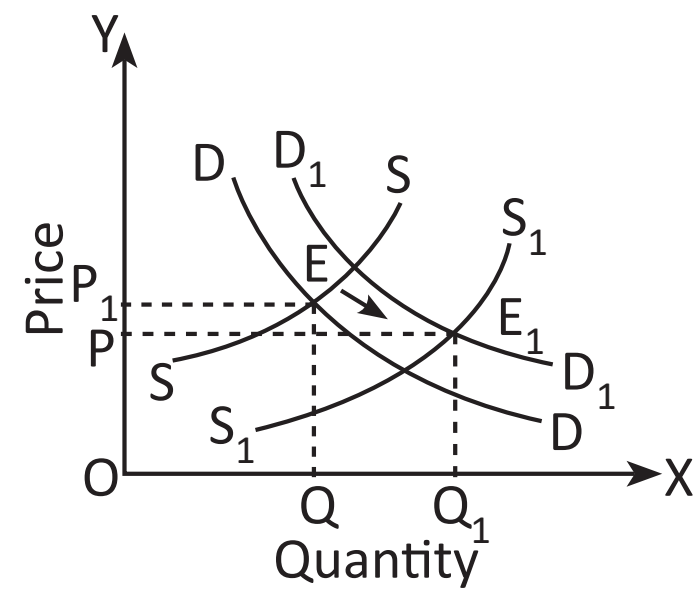
Increase in supply > Increase in demand

- ❖ When both demand and supply inc.; equilibrium quantity inc. Equilibrium price is uncertain.
- ❖ When both demand and supply dec.; equilibrium quantity dec. Equilibrium price is uncertain.

Quantity demanded and
supplied (in units)
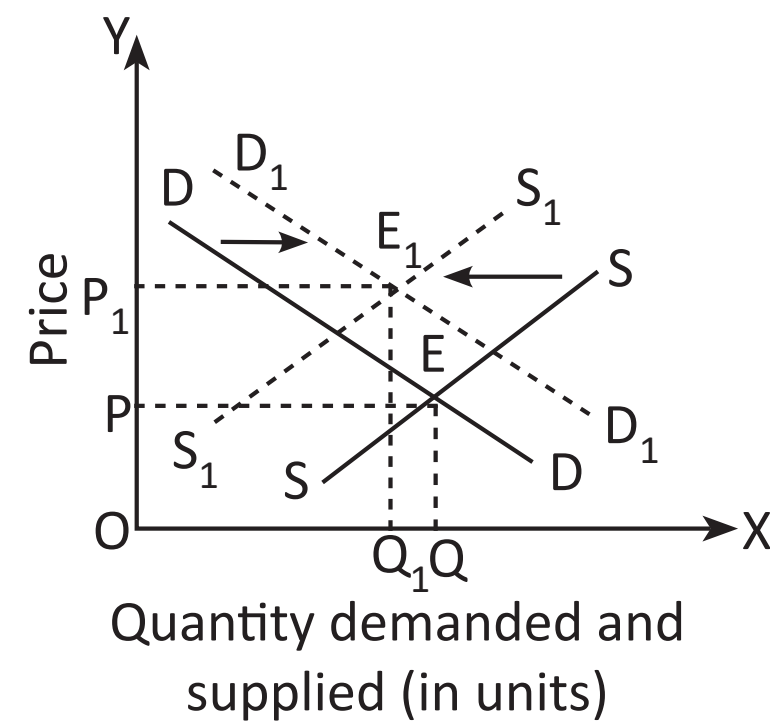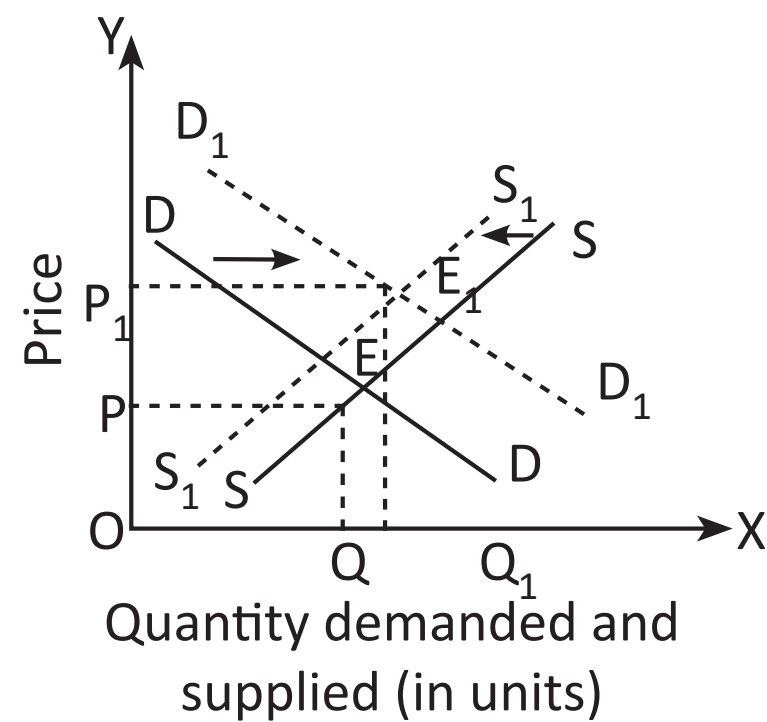
Quantity demanded and
supplied (in units)

1. Perfect Competition

1.1 Features/Characteristics of Perfect Competition

- ❖ Large Number of Buyers and Sellers
- ❖ Homogenous or Identical Producers
- ❖ Free Entry and Exit
- ❖ Firms individually are price takers

1.2 Price Determination Under Perfect Competition

- ❖ **Equilibrium** of the Industry-
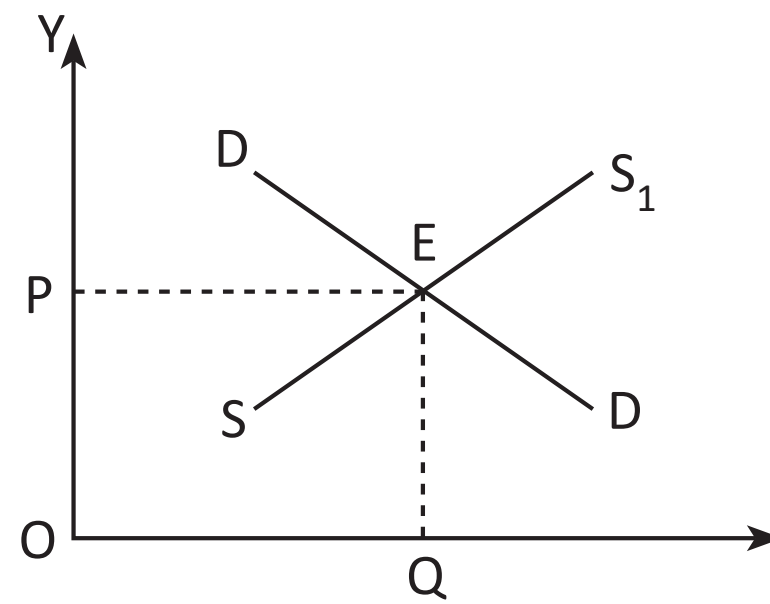
At point E , demand = supply − it is market equilibrium

❖ **Equilibrium** of the Firm-
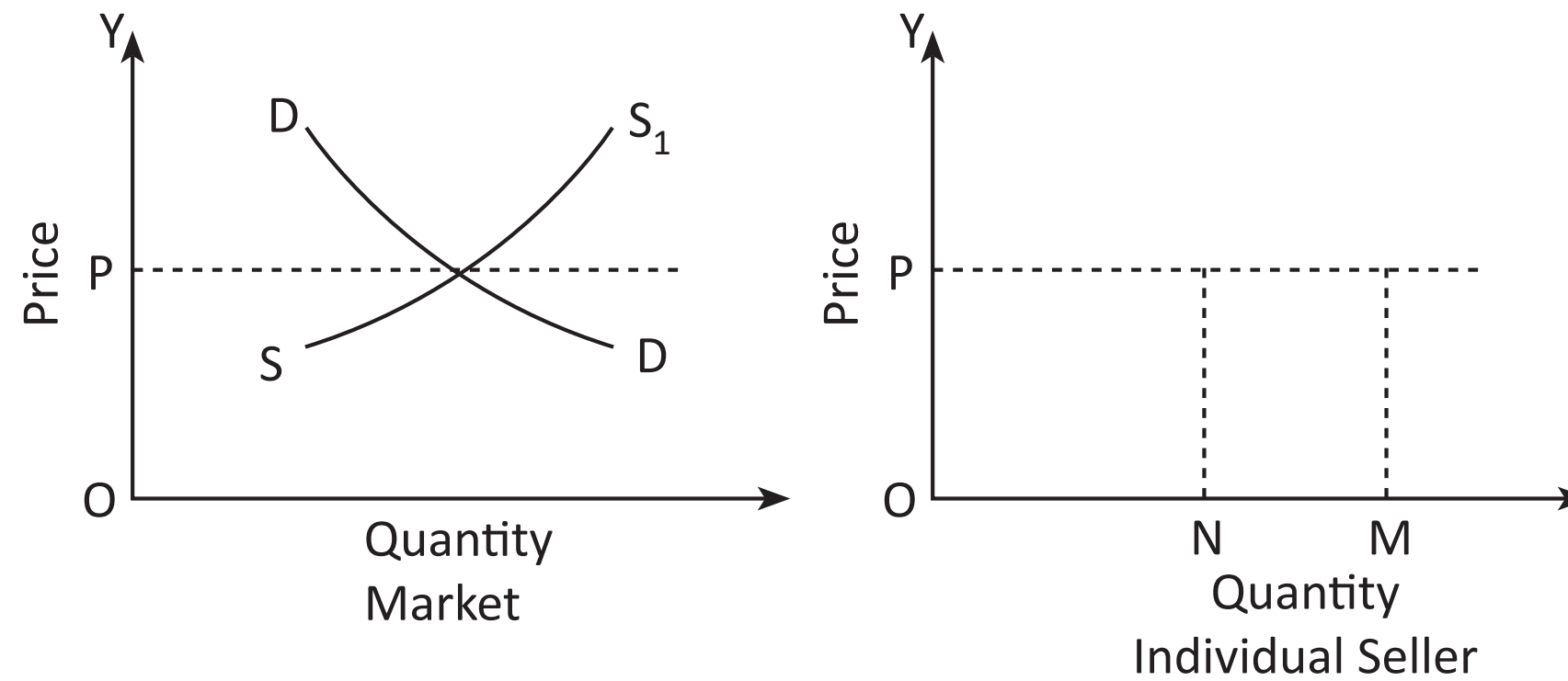
(Price line = demand curve/MR/AR)

- ❖ Equilibrium of a firm is when it maximizes its profit.
- ❖ Price is set by **market demand and supply**.
- ❖ **Perfectly elastic** demand curve for individual firms

1.3 Conditions of Equilibrium of Firm

1. $MC = MR$
2. MC curve cuts MR from below- (MC has a +ve slope)

1.4 Short Run Profit Maximization

- ❖ In the **short run**, capital is fixed, so firms adjust **variable inputs** to maximize profit.

1.5 Short Run Supply Curve of the Firm in Competitive Market
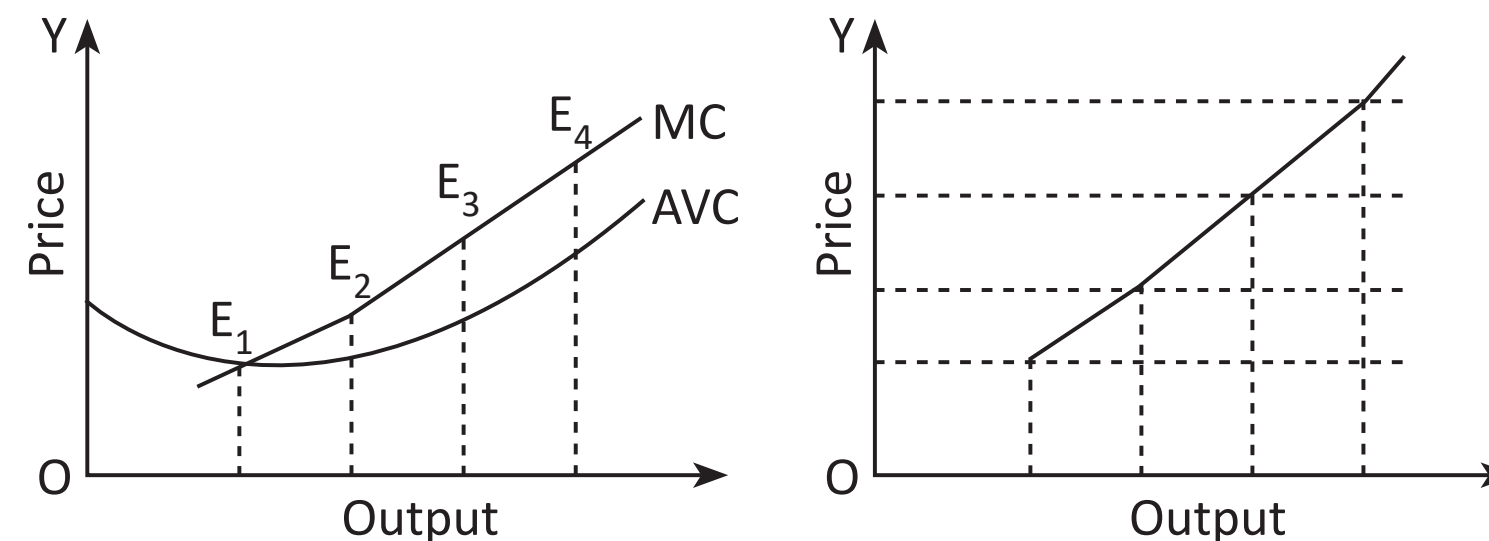
Marginal cost and supply curves for a price-taking firm

- ❖ The MC curve above AVC is the firm's supply curve.

1.6 Types of Profits

❖ **Supernormal Profit:** AR > ATC
❖ **Normal Profit:** AR = ATC

1.7 Losses

Situation	Condition	Firm's Action
Losses at Equilibrium	MR = MC, but P < ATC	Firm operates with losses
Minimizing Losses	P ≥ AVC	Continue production
Covering Some Fixed Cost	P > AVC	Stay in business
Shut Down Point	P < AVC	Stop production

1.8 Long Run Equilibrium

❖ **In case of Firm:** Equilibrium occurs at **min. LAC**, where **LAC = LMC = AR = MR**.
❖ **In case of Industry:**
1. All firms are in **equilibrium**, earning **normal profit** (zero economic profit).
2. No firm has an incentive to **enter or exit**.
3. **Market price** ensures **quantity demanded = quantity supplied**.
4. **LMR= LAR= P= LMC= LAC**
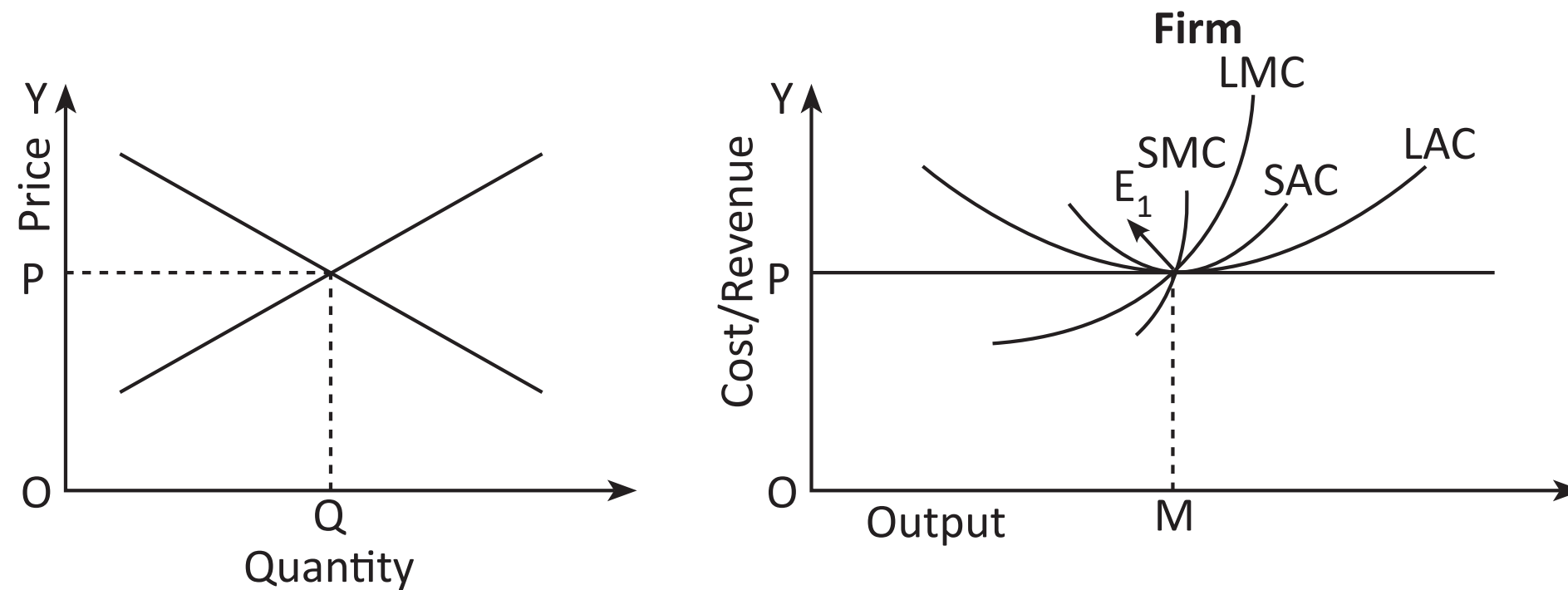
2. Monopoly

❖ Single seller of a product which has no close substitutes.

2.1 Features

❖ Single Seller – Firm & industry are the same.

❖ Barriers to Entry – Economic, legal, and institutional restrictions exist.

❖ No Close Substitute – Full market control, price maker, (PED< 1).

❖ Market Power – Can set prices above MC, earning positive profit.

2.2 How Do Monopolies Arise?

- ❖ Control over resources and technology
- ❖ Unique product development and acquisition
- ❖ Government grants and exclusive rights
- ❖ Patents and copyrights
- ❖ Business combinations and cartels
- ❖ Natural monopoly (low unit cost for single firm)
- ❖ Legal and regulatory barriers

2.3 Monopolist's Revenue Curve
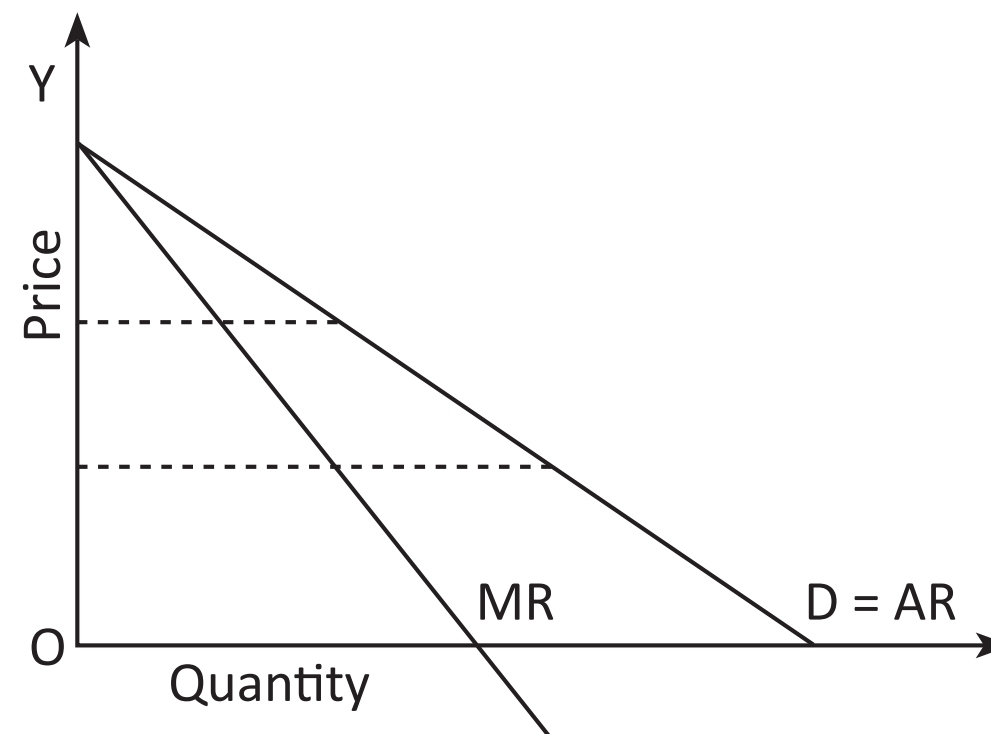
❖ Relation Between AR and MR in Monopoly
1. Both AR and MR have a **downward slope**.
2. **MR curve has twice the slope** of the AR curve.
3. **AR is always positive**, but **MR can be zero or negative**.

2.4 Profit Maximization

❖ A monopoly firm decides its output and price in short run and long run.

2.5 Short run Equilibrium

❖ Conditions: (i) MR = MC
(ii) MC curve cuts MR curve from below

2.6 Can Monopolist Incur Loss?

❖ **Yes**, if demand is very low and **ATC > AR**.

2.7 Long Run Equilibrium

❖ Adjusts plant size or utilizes existing plant optimally for profit maximization.

2.8 Price Discrimination

❖ A pricing method to earn abnormal profits by **charging different prices for the same commodity.**
❖ **Examples**: Doctors, lawyers, consultants charging different fees.

1. Conditions for Price Discrimination
➢ Full control over supply
➢ Market divided into sub-markets
➢ Different price elasticity in different markets
➢ No possibility of resale
2. Key Pricing Strategy
➢ Higher prices in inelastic demand markets
➢ Lower prices in highly responsive markets
3. Objectives of Price Discrimination
➢ Maximize profit
➢ Dispose of surplus stock
➢ Achieve economies of scale
➢ Capture foreign markets
➢ Ensure equity through pricing
4. Equilibrium Under Price Determination
A monopolist must decide:
➢ **Total output to produce**

- ➢ **Distribution of output across sub-markets**
- ➢ **Prices to charge in each market**

Equilibrium Conditions:

- ➢ **Profit maximization → MC = Aggregate MR (AMR)**
- ➢ **MR should be equal in both markets**
- ➢ **MC should be equal across markets**

5. Types of Price Discrimination

- ➢ **First-Degree** → The monopolist charges each consumer the maximum price they can pay, extracting full consumer surplus.
  - ✦ **Examples:** Doctors, lawyers, consultants charging different fees; auctions; bid and offer system.

- ➢ **Second-Degree** → Prices vary based on quantity or usage, partially taking consumer surplus.
  - ✦ **Examples:** Bulk discounts (family pack soaps cost less per kg), tiered pricing in electricity, water.

- ➢ **Third-Degree** → Prices differ based on consumer segments or locations, dividing the market.
  - ✦ **Examples:** Senior citizen discounts in railways, different prices for domestic and commercial users, dumping.

2.9 Economic Effects of Monopoly

- ❖ Reduces efficiency and welfare
- ❖ Higher prices, lower output
- ❖ Long-run economic profits (P > MC)
- ❖ Limits consumer choices
- ❖ Restricts market entry

3. Imperfect Competition- Monopolistic Competition

- ❖ Mix of **monopoly** and **perfect competition**
- ❖ **Example**: Dettol, Lux, Dove (same product, different branding)

3.1 Features

- ❖ Many sellers
- ❖ Product differentiation (size, design, color)
- ❖ Free entry and exit
- ❖ Non-price competition (advertising, service)

3.2 Price Output Determination Under Monopolistic Competition- Equilibrium of a Firm
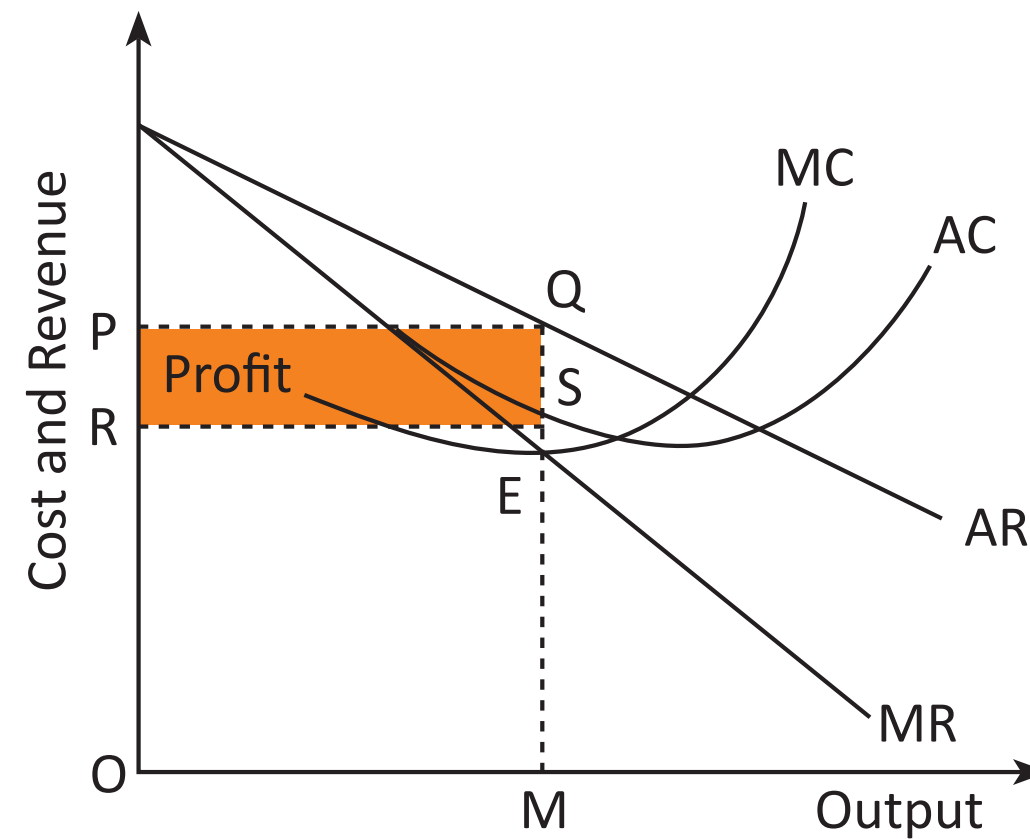
Fig- Supernormal Profits

❖ Each firm is a **price maker**

Conditions for Equilibrium of Individual Firm

❖ MC = MR

❖ MC must cut MR curve from below.

Short Run

❖ **MC = MR at E** (Profit-maximizing output)

❖ **Equilibrium price = OP**, **Equilibrium output = OM**
Long Run
❖ **AR = AC** (Zero economic profit)
❖ Firms **exit if losses persist**
❖ **Excess capacity remains** at equilibrium

4. Oligopoly

❖ Oligopoly → 'competition among few sellers'
❖ **Examples** - Airlines, telephone connection, petroleum refining, power generation, cold drinks, automobile, & Internet service providers etc.

4.1 Characteristics

❖ **Strategic Independence** – Firms make independent decisions but face intense competition.
❖ **Advertising & Selling Costs** – Heavy use of marketing to gain market share.
❖ **Group Behavior** – Oligopoly is about group dynamics, not individual decision-making

4.2 Types of Oligopoly

1. Pure & Impure Oligopoly
○ **Pure Oligopoly** – Sells homogeneous products (e.g., petroleum, steel).
○ **Impure Oligopoly** – Sells differentiated products (e.g., talcum powder).
2. Open & Closed Oligopoly
○ **Open Oligopoly** – New firms can enter and compete.
○ **Closed Oligopoly** – Entry is restricted.
3. Collusive & Competitive Oligopoly
○ **Collusive Oligopoly** – Firms coordinate on price/output decisions.
○ **Competitive Oligopoly** – Firms compete without coordination.
4. Partial & Full Oligopoly
○ **Partial Oligopoly** – One dominant firm acts as a price leader.
○ **Full Oligopoly** – No price leadership.
5. Syndicated & Organized Oligopoly
○ **Syndicated Oligopoly** – Firms sell through a centralized syndicate.
○ **Organized Oligopoly** – Firms form an association to set prices, output, and quotas.

4.3 Oligopoly Models

1. Ignore Interdependence – Firms act independently.
2. Non-Collusive Models
❍ **Cournot Model** – Firms decide output independently.
❍ **Stackelberg Model** – Leader firm sets output; others follow.
❍ **Bertrand Model** – Firms compete on price.
3. Collusive Model – Firms coordinate to maximize joint profits (e.g., OPEC).

4.4 Price Leadership

❖ Formed in industries with **smaller firms** to coordinate activities.
❖ **Rely on agreements** to earn monopoly profits (inelastic demand).
❖ **Dominant firms** influence smaller firms

4.5 Kinked Demand Curve/Sweetzy's Model

❖ **Explains price rigidity** in oligopoly.
❖ **Kinked Demand Curve** – Elastic above the kink, inelastic below.
❖ **Price Stability** – Firms avoid price changes due to uncertain gains.
❖ **Kink Formation** – Firms stick to prevailing prices due to market behavior.
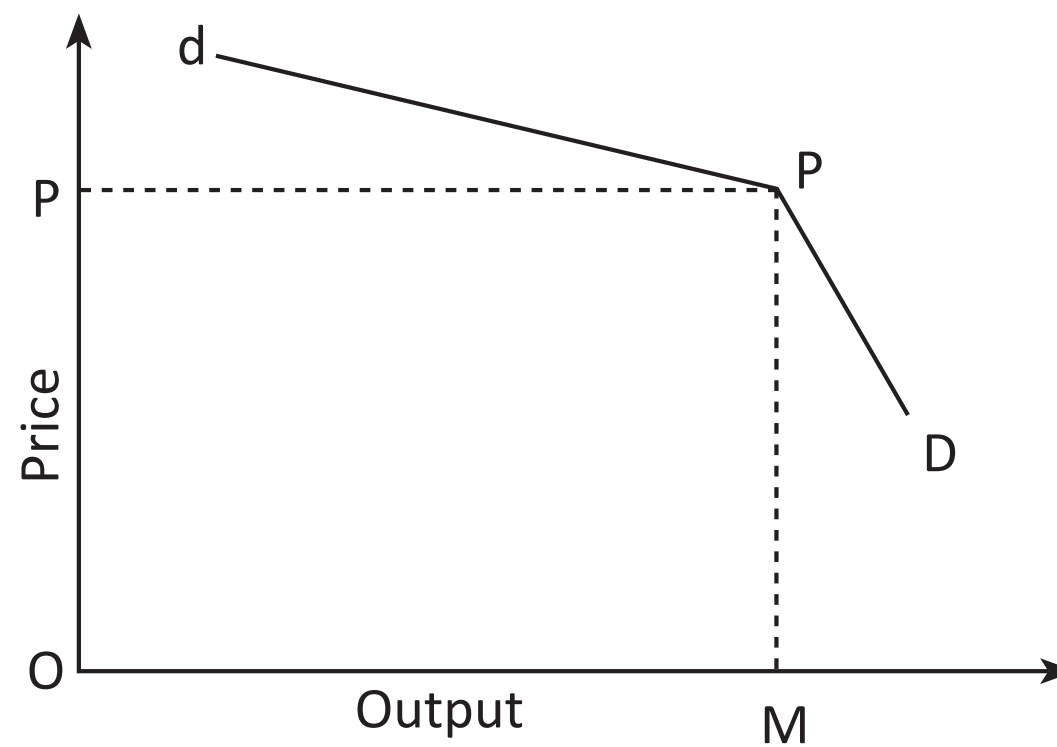
Fig- Kinked demand curve under oligopoly

5. Other Markets

- ❖ **Duopoly** – A type of oligopoly with only **two firms**.

- ❖ **Monopsony** – **Single buyer**, usually in factor markets.

- ❖ **Oligopsony** – **Few large buyers**, relevant to factor markets.

- ❖ **Bilateral Monopoly** – **Single buyer & single seller** (Monopoly + Monopsony).

BUSINESS CYCLES

BUSINESS CYCLES

1. Meaning

❖ Business Cycles refer to periodic fluctuations in economic activities, alternating between growth and decline. Business cycles is also known as trade cycles.

2. 4 Phases of Business Cycles

| Expansion | Boom | Contraction | Depression |
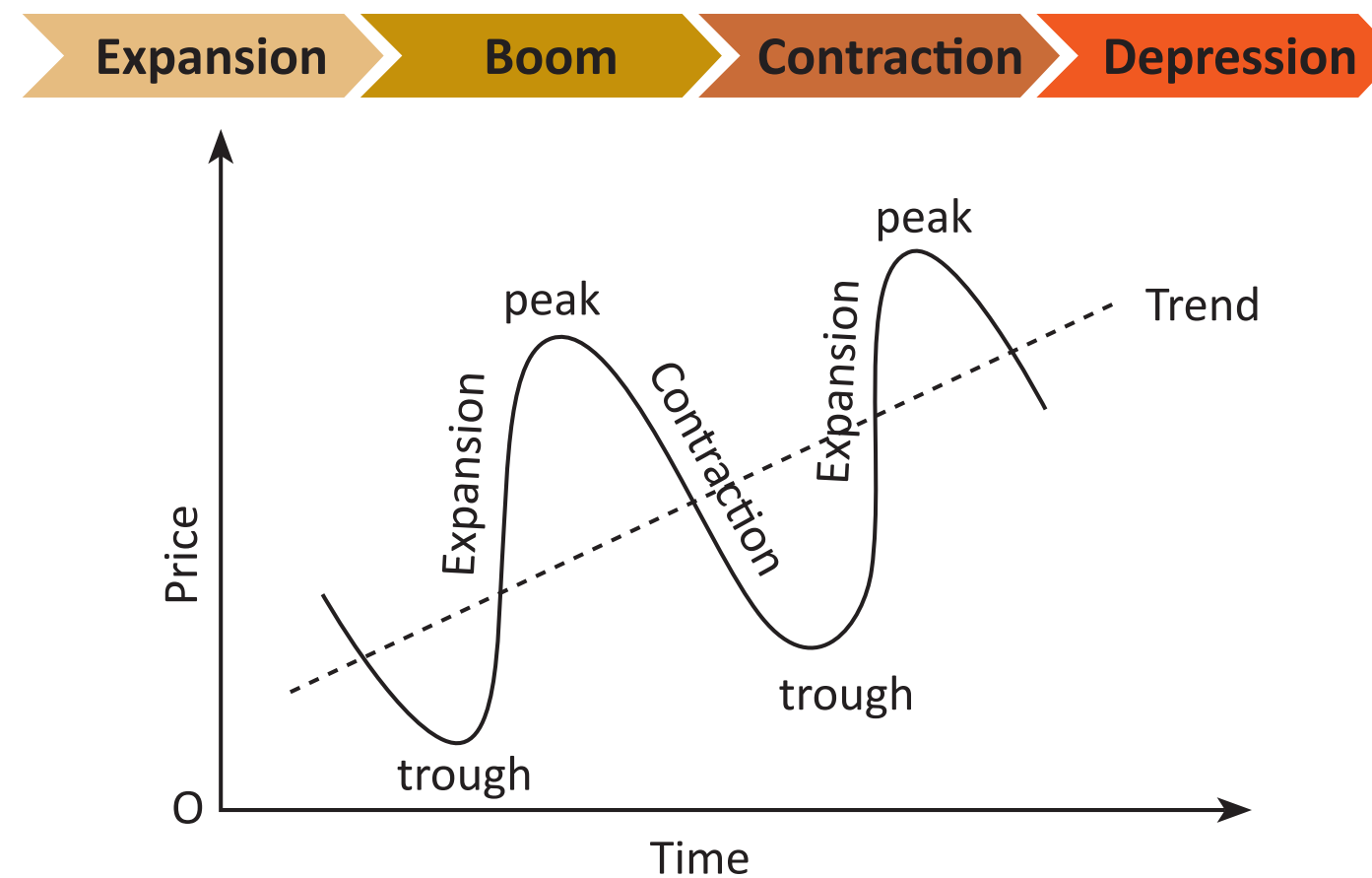
2.1 Expansion- also known as upswing or boom

- ❖ Increase inl output, employment, aggregate demand etc.
- ❖ This state exists till there is full employment of resources and production in at max. level.
- ❖ Involuntary employment is 0, and unemployment is frictional or structural.
- ❖ Price and cost raises faster.
- ❖ High level of consumer spending, business confidence, production, factor incomes, profit, investment, demand.

2.2 Peak/Prosperity

- ❖ Top/ highest point of business cycle.
  - ○ Inputs are difficult to find and input price increase
  - ○ Greater strain on fixed income earners
  - ○ Actual demand stagnates
- ❖ End of expension, economic growth stabilized for a short time, and then move in reverse direction.

2.3 Contraction/Downswing

- ❖ Once peak is reached, increase in demand is halted and starts to decrease.
- ❖ Producers do not instantaneously recognise the pulse of economy and continue to anticipate higher level of demand. Therefore, maintain the existing level of investment and production.
- ❖ Business firms become pessimistic.
- ❖ Fall in profit expectations.
- ❖ Hence reduce investment and economy over-heats and touches the recession.

2.4 Trough/Depression

- ❖ Growth rate becomes -ve.
- ❖ Level of national income, expenditure declines rapidly.
- ❖ Price are at the lowest.
- ❖ Shut down of various production facilities.
- ❖ Fall in interest rate.
- ❖ Demand for holding money increases.
- ❖ Through generally lasts for some time and marks the end of pessimism and the beginning of optimism.

2.5 Recovery

- ❖ Economy starts rising from the lowest trough.
- ❖ Marks the shift from pessimism to optimism.
- ❖ Labour accepts lower wages initially.
- ❖ Businesses expect lower returns.
- ❖ Confidence gradually returns, leading to increased investment.
- ❖ **Capital goods industries (durable goods) are highly sensitive to business cycles.**

3. Economic Indicators

```
                    ┌──────────────────────┐
                    │  Economic Indicators │
                    └──────────────────────┘
        ┌───────────────────┼───────────────────────┐
        ▼                   ▼                       ▼
┌────────────────┐  ┌────────────────┐  ┌──────────────────────────┐
│ Leading        │  │ Lagging        │  │ Coincident or Concurrent │
│ Indicators     │  │ Indicators     │  │ Indicators               │
└────────────────┘  └────────────────┘  └──────────────────────────┘
        │                   │                       │
        ▼                   ▼                       ▼
┌────────────────┐  ┌────────────────┐  ┌──────────────────────────┐
│ E.g. Changes in│  │ E.g. Unemploy- │  │ E.g. GDP, Inflation      │
│ Stock Price,New│  │ ment, Corporate│  │ Industrial               │
│ orders for     │  │ profit, labour │  │ Production               │
│ capital and    │  │ cost per unit  │  │                          │
│ consumer goods │  │ of output      │  │                          │
└────────────────┘  └────────────────┘  └──────────────────────────┘
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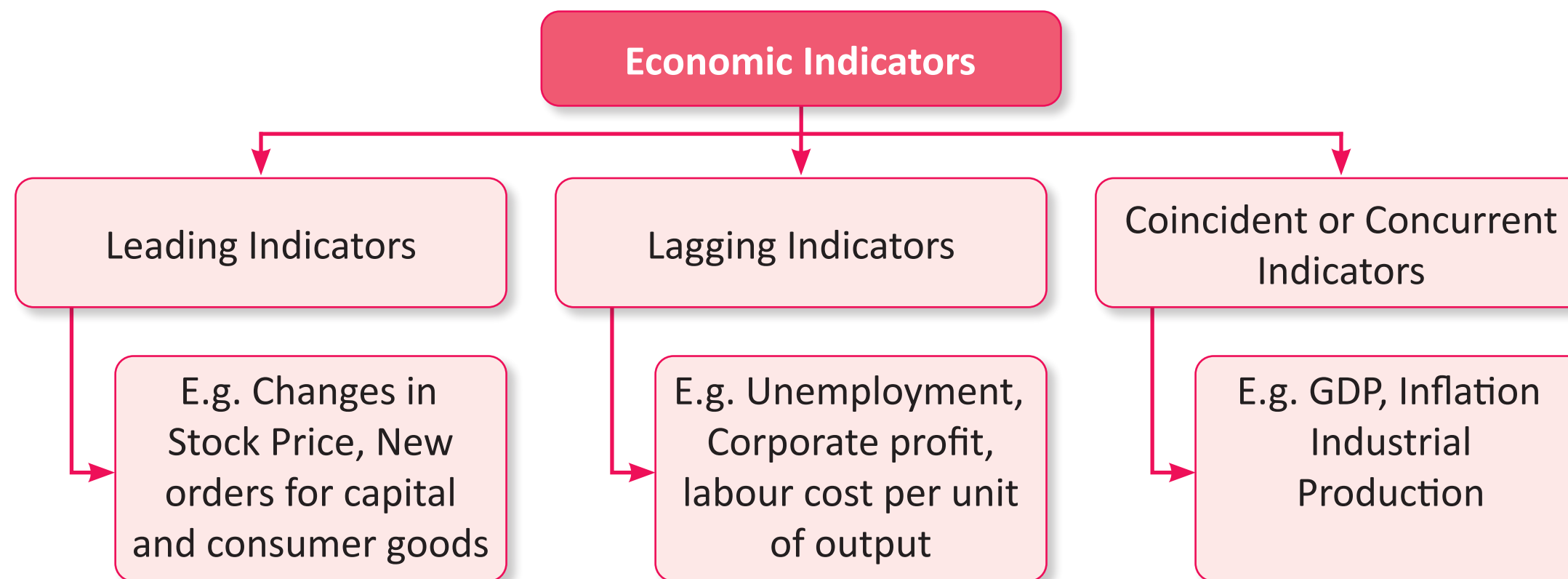
1. **Leading:** Variable that changes before the real output changes.

2. **Lagging:** Variable that changes after the real output changes.

3. **Coincident:** Variable that occurs simultaneously with business cycle movements.

4. Features of Business Cycles

1. Occurs periodically, do not exhibit same regularity, duration varies, intensity of fluctuation also varies.

2. Indefinite length of phases (expansion Boom, contraction, depression).

3. Disturbances in one/more sectors get easily transmitted to all the other sectors.

4. Originates in free market.

5. Business cycles are complex phenomenon, effected by varying factors.

6. Affects output, employment, investment, trade, prices, etc.

7. Contagious and spreads via trade (e.g., Great Depression).

8. Significant consequences on well-being.

5. Causes of Business Cycles

Internal Causes
- ❖ Fluctuations in Effective Demand
- ❖ Fluctuations in Investment
- ❖ Variations in goernment spending
- ❖ Macroeconomic policies
- ❖ Money Supply
- ❖ Psychological factors

External Causes
- ❖ War
- ❖ Post War Reconstruction
- ❖ Technology shock
- ❖ Natural Factors
- ❖ Populaton growth
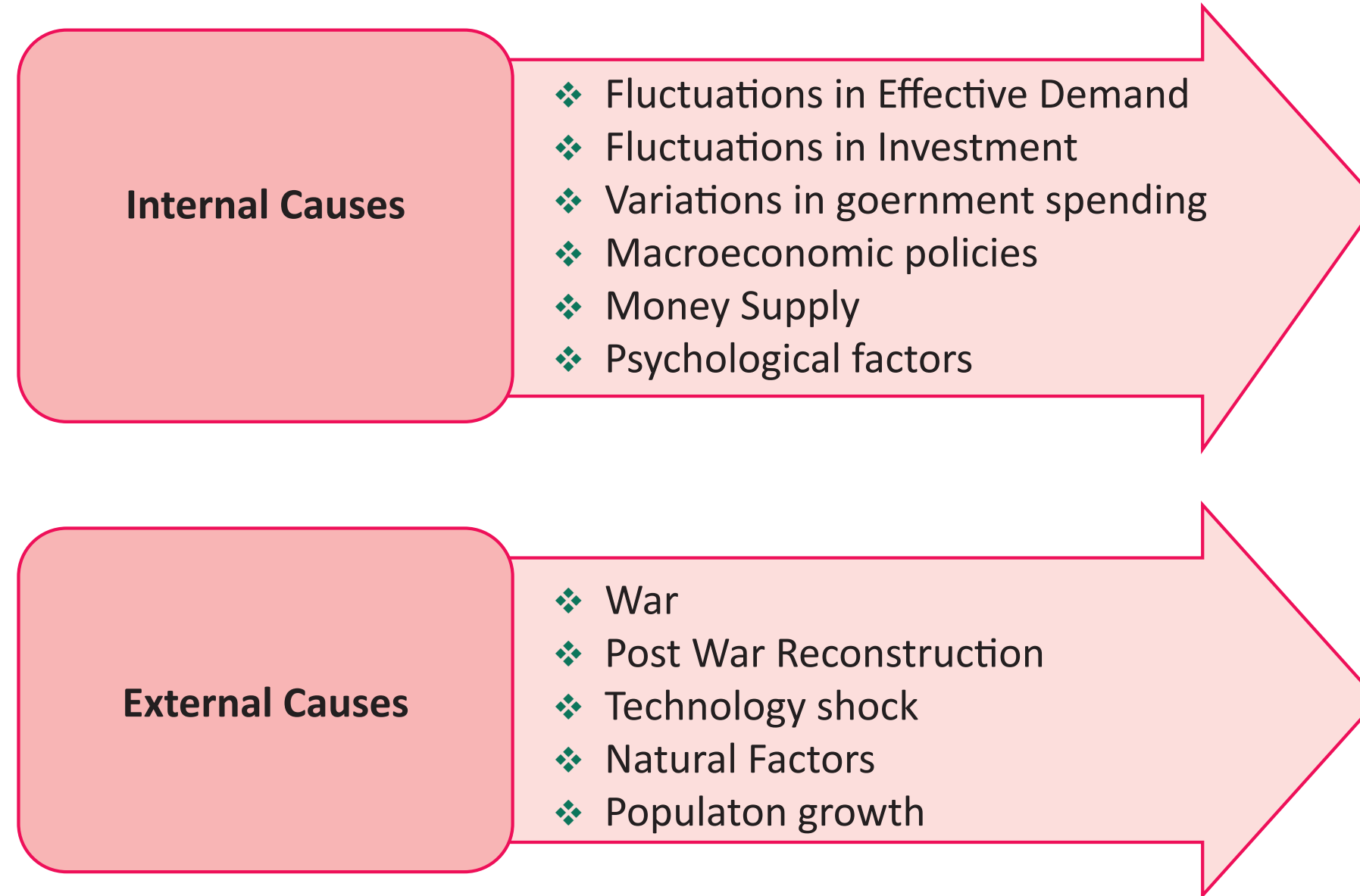
6. Relevance of Business Cycle – Decision Making

- ❖ It affects the demand of products, and hence the profits.
- ❖ It affects the decision of entry of new firms.

❖ Important for success of new product launch.
❖ Surviving the sluggish business cycle, business plans policies with respect to products, prices etc.
❖ Business cycles do not affect all sectors uniformly.

7. Examples of Business Cycle

❖ Great Depression of 1930
❖ Information Technology bubble burst of 2000
❖ Global Economic Crisis (2008-09)
❖ Covid-19 Pandemic

8. Name of the Economists & their Quotations

❖ **J. M. Keynes:** Lower aggregate expenditure is the reason for massive decline in Income and employment.
❖ **Hawtrey**: Trade Cycle is purely Monetary phenomenon.
❖ **Schumpeter**: Trade cycle is result of innovation.
❖ **A. C. Pigou**: Business Activities are affected by wave of optimism & pessimism.

DETERMINATION OF NATIONAL INCOME

- **Unit 1: National Income Accounting**
- **Unit 2: The Keynesian Theory of Determination of National Income**

1 Unit NATIONAL INCOME ACCOUNTING

1. National Income Accounting

1.1 National Income Compilation Authorities

- ❖ **CSO (Central Statistical Organization):** Compiles National Income under MoSPI.
- ❖ **DES (Directorates of Economic and Statistics):** Responsible for National Income estimation at the state level.

2. Usefulness and Significance of National Income Estimates

- ❖ Analyzes Short-Run Performance
- ❖ Helps Forecast Future Demand
- ❖ Assesses Economic Welfare
- ❖ Shows composition & structure of different sectors
- ❖ Assesses & Evaluates Economic Policies
- ❖ Highlights Income Distribution & Inequality
- ❖ Guide to make policy for growth & inflation

3. Different Concepts of National Income Accounting

3.1 Gross Domestic Product (GDP)

❖ **GDP**: The value of all final goods and services produced within a country during a specific time period.

❖ **Nominal GDP**: GDP calculated at current year price levels. It includes both quantity and price changes.

❖ **Real GDP**: GDP calculated at the base year price levels, adjusted for inflation.it is changed due to change in physical quantity of output only

❖ **GDP Deflator or Price index**: GDP deflator $= \dfrac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$

3.2 Net Domestic Product (NDP)

❖ Net amount/value of goods and services produced in a country during a given period of time.

❖ $NDP_{MP} = GDP_{MP} -$ **Depreciation**

3.3 Gross National Product (GNP)

❖ The total value of all goods and services produced by a country's residents, both domestically and abroad, during a specific period.

❖ **Formula: GNP at MP = GDP at MP + Net Factor from Abroad** (NFIA)

❖ **NFIA** = **Net Compensation of Employees** + **Net Income from Property and Entrepreneurship** + **Net Retained Earnings**

3.4 Net National Product at Market Price (MP)

- ❖ $NNP_{MP} = GNP_{MP} - Depreciation$

- ❖ $NNP_{MP} = NDP_{MP} + NFIA$

- ❖ $NNP_{MP} = GDP_{MP} + NFIA - Depreciation$

3.5 Gross Domestic Product at Factor Cost

- ❖ The money value of output produced within a country's domestic limits in a year as received by the factors of production.

- ❖ $GDP_{FC} = GDP_{MP} - Indirect\ taxes + Subsidies$

3.6 Net Domestic Product at Factor Cost (NDP_{FC})

- ❖ Sum of domestic factor incomes/domestic factor incomes net of depreciation.

- ❖ $NDP_{FC} = NDP_{MP} - Net\ indirect\ tax$

3.7 Net National Product at Factor Cost

- ❖ $NNP_{FC} = National\ Income = Domestic\ income + NFIA$

- ❖ If NFIA is +ve, then national income > domestic national income.

3.8 Per Capita Income

❖ Measures a country's output per person, indicating the standard of living.

❖ **Formula**: Per capital income = $\dfrac{\text{GDP (adjusted for inflation)}}{\text{Total population}}$

3.9 Personal Income (PI)

❖ **PI = NI – Undistributed profits – Net interest payments made by households – Corporate Tax + Transfer Payments to the households from firms and government.**

3.10 Disposable Personal Income (DI)

❖ **DI = PI – Personal Income Taxes – Non tax payments**

3.11 Private Income

❖ Measure of the income of the private sector from all sources within and outside the country.

Formula Chart

NDP_{FC}	–
Less: Income from Property and Entrepreneurship accruing to Government Administrative	–
Departments (Railways, Post Office etc.)	–

Less: Savings of Non-departmental Enterprises.	–
Income from Domestic Product Accruing To Private Sector	–
Add: NFIA	–
Add: National Debt Interest	–

Add: Current Transfers from Government	–
Add: Other Net Current Transfers from rest of the world	–
Private Income	–
Less: Undistributed Profits	–
Less: Corporate Tax	–
Personal Income	–
Less: Personal Taxation	–
Less: Non-Tax Payment	–
Disposable Personal Income	–

3.12 Net National Disposable Income (NNDI)

❖ **NNDI** = Net national income + Other net current transfers from the rest of the world.

❖ **NNDI** = NNI + Net taxes on income and wealth receivable from abroad + Net social contributions and benefits receivable from abroad.

3.13 Gross National Disposable Income

❖ **NNDI + CFC =** GNI + Other net current transfers from the rest of the world.

4. Measurement of National Income in India

4.1 The Circular Flow of Income
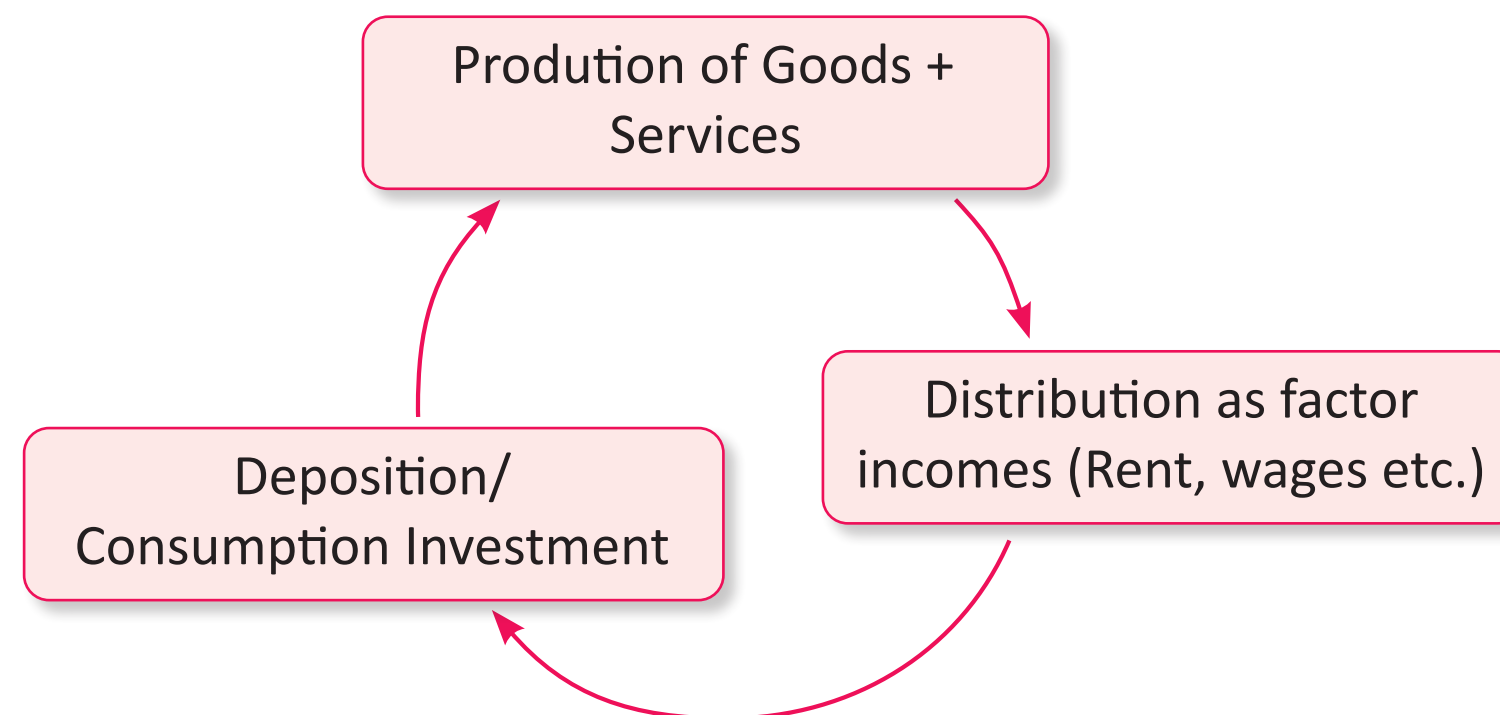
❖ **Phase 1: Production**: Firm produces goods/services with the help of factor services
❖ **Phase 2: Income/Distribution**: The flow of factor income in the form of rent etc, from firms to households.
❖ **Phase 3: Expenditure/Disposition**: The income received by different factors of production, is spent on consumption of goods and services.

4.2 Value Added Method/Product Method/industrial Origin Method

```
                    ┌─────────────────────────┐
                    │  GVA_MP/VALUE ADDED      │
                    └─────────────────────────┘
              ┌──────────────┴──────────────┐
              ▼                              ▼
    ┌──────────────────┐          ┌──────────────────┐
    │ Value of Output  │          │ Intermediate Cost│
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              │                              │
              ▼                              ▼
    ┌──────────────────┐          ┌──────────────────┐
    │  Sales + ΔStock  │          │  Raw Material    │
    └──────────────────┘          └──────────────────┘
                                  ┌───────────┴───────────┐
                                  ▼                       ▼
                        ┌──────────────────┐   ┌─────────────────────┐
                        │ Domestic Purchase│   │Import of Raw Material│
                        └──────────────────┘   └─────────────────────┘
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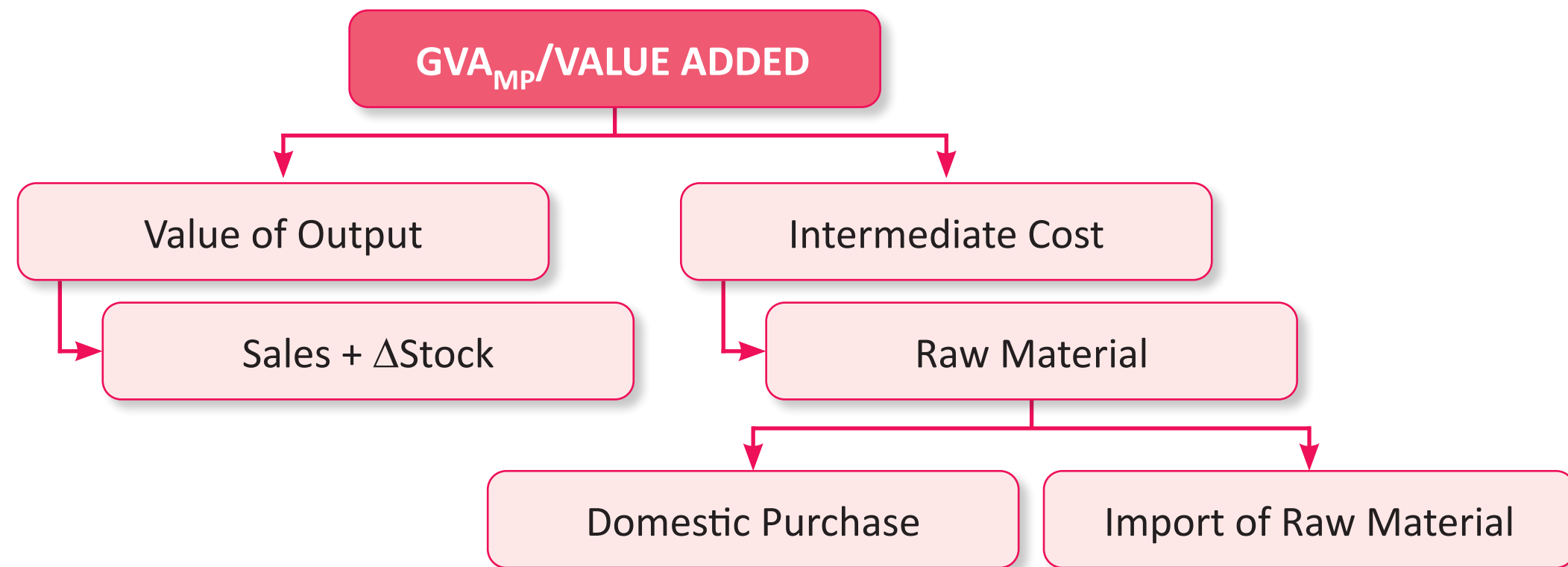
❖ $GVA_{MP} = Sales + \Delta stock - IC$
❖ $NVA \text{ at } FC = GVA_{MP} - Dep - NIT$
❖ Estimation of National Income: $[\Sigma \textbf{GVA}_{\textbf{MP}} - \textbf{Depreciation} = \textbf{Net value added (NVA}_{\textbf{MP}}\textbf{)}]$

- ❖ NVA_{MP} – Net Indirect Taxes = $NDP(NVA_{fc})$
- ❖ $NDP(NVA_{FC})$ + NFIA = $NI(NNP_{FC})$

4.3 Income Method/Factor Payment Method/Distributed Share Method

- ❖ It sums up incomes earned by all factors of production within a country's economy.
- ❖ **NNP_{FC} =** Compensation of employees + Operating surplus (rent + interest + profit + royalty) + Mixed income of self employed + Net factor income from abroad (NFIA)
- ❖ Profit = Corporate Taxes + Dividend + Retained Earnings

4.4 Expenditure Method/Income Disposable Method

- ❖ **NI** is the total final expenditure in an economy during a period (typically an accounting year) and expenses of NPISH.
- ❖ **Key Components of GDP Calculation:**
  1. **Private Expenditure (C)**: Spending by households on goods and services for consumption.
  2. **Investment Expenditure/Gross Domestic Capital Formation (I)**: Business spending on capital goods to increase production capacity.
  3. **Government Expenditure (G)**: Government spending on public services, defense, etc.
  4. **Net Exports (N_X)**: The difference between exports and imports.
- ❖ **GDP_{MP}** = C + I + G + N_X

5. System of Regional Accounts in India

- ❖ **NSDP (Net State Domestic Product)**: Measures total goods and services produced in a state in a given period.

- ❖ **Per Capita State Income**: Per Capita State Income = $\dfrac{\text{NSDP}}{\text{Mid Year Projected population of the state}}$

- ❖ **State-Level Estimates**: Prepared by state income units with CSO assistance.

- ❖ **Supra-Regional Sectors**: Sectors like railways and banking, allocated to states based on indicators.

6. GDP and Welfare

- ❖ GDP is often used as an indicator of a country's welfare.

7. Limitations of GDP

7.1

1. **Income Inequality**: Doesn't reflect distribution of income.

2. **Tech & Management**: Doesn't capture improvements in these areas.

3. **Illegal Activities**: Not accounted for.

4. **Non-Market Activities**: Excludes health/education.

5. **Work Hours**: Longer hours increase GDP but ignore loss of leisure.
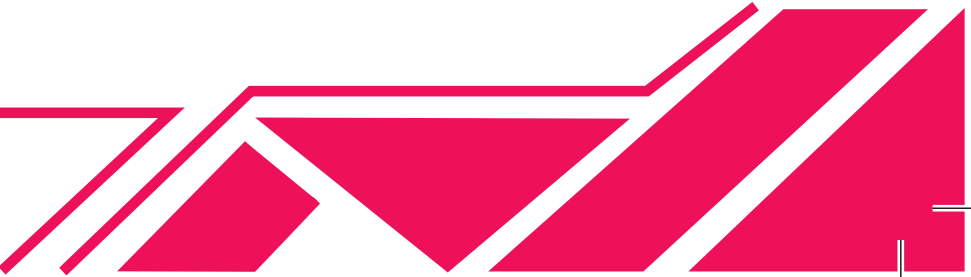
7.2 Limitations and Challenges-National Income Calculation

- ❖ Lack of agreed definition – national income.
- ❖ Accurate distinction of final and intermediate goods. Issue of transfer payments.
- ❖ Services of durable goods.
- ❖ Difficulty of incorporating distribution of income.
- ❖ Valuation of new goods at constant price.

7.3 Other Challenges

- ❖ Inaccurate and unrelatable data.
- ❖ Presence of unmonetised sector.
- ❖ Production of self-consumption.
- ❖ Illiteracy and ignorance leading to unrecorded incomes.
- ❖ Lack of proper occupational classification.

2 Unit

THE KEYNESIAN THEORY OF DETERMINATION OF NATIONAL INCOME

❖ **Keynes' General Theory (1936)**: Revolutionized modern **macroeconomics**.

1. Basic Concepts

1.1 Aggregate Supply (AS)

❖ Planned total supply of goods & services.

❖ **AS = Total Production.**

1.2 Aggregate Demand (AD)

Total planned expenditure in the economy.

1.3 Equilibrium

AS = AD or leakages = injections

1.4 Keynesian Income Determination Models

3 Models

- 2 Sector Model
- 3 Sector Model
- 4 Sector Model
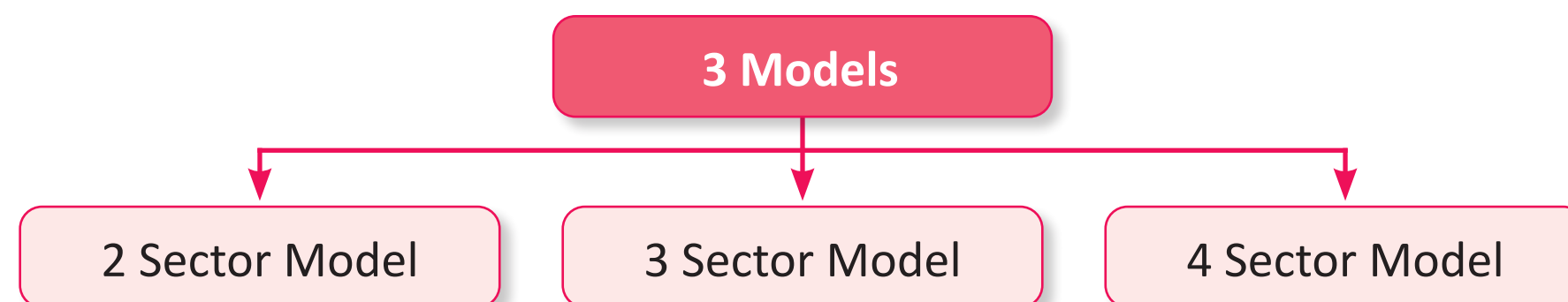
1.5 Two-Sector Model

- ❖ **Sectors Involved** – Household & Business

- ❖ **Aggregate Demand (AD)** – C+I

- ❖ **Aggregate Supply (AS)** – C+S

- ❖ **Equilibrium Condition** – AD=AS or I=S

Circular Flow in a Two Sector Economy

Wages, Rent, Interest, Profit
Factor Payments

Factor Inputs

Household   Firm

Goods and
Services (O)

Consumption
expenditure
(C)
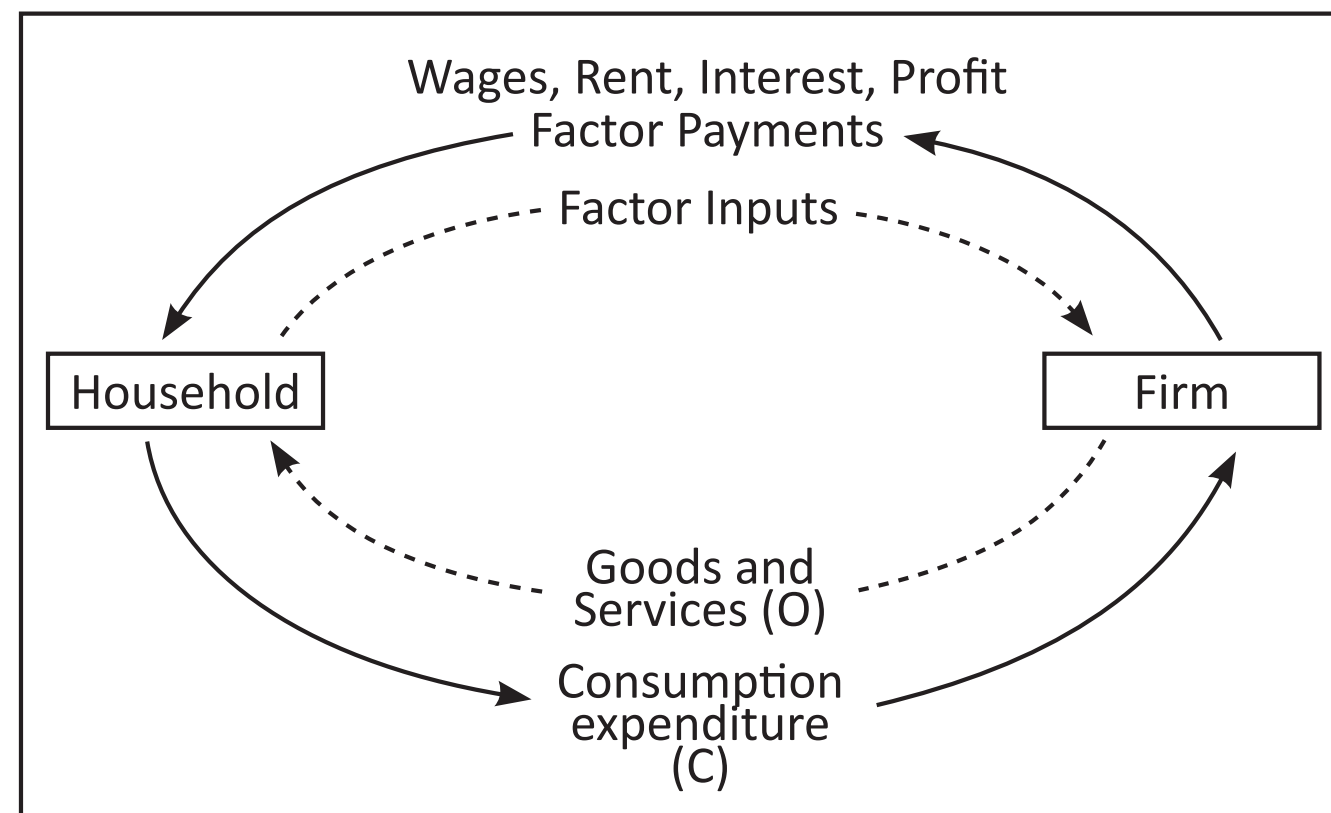
Factor Payments = Household Income = Household Expenditure
= Total Receipts of Firms = Value of Output

2. Consumption Function

2.1 Definition

❖ Relationship between aggregate consumption expenditure & aggregate disposable income.

❖ **Formula:** C = f(Y)

2.2 Consumption Function (Consumption – Income Relationship)

❖ C = a + bY , where (b = MPC = $\dfrac{\Delta C}{\Delta Y}$)

2.3 Consumption Function (Propensity to Consume)

❖ Average Propensity to Consume (APC) = $\dfrac{C}{Y}$

❖ Marginal Propensity to Consume (MPC) = $\dfrac{\Delta C}{\Delta Y}$ = **b**

The diagram shows a graph with Consumption on the vertical axis and Income on the horizontal axis. A straight line labeled $C = f(Y)$ rises from the vertical intercept, with its slope marked as "Slope = b". The angle at the intercept is labeled b, and the vertical intercept distance is labeled a.
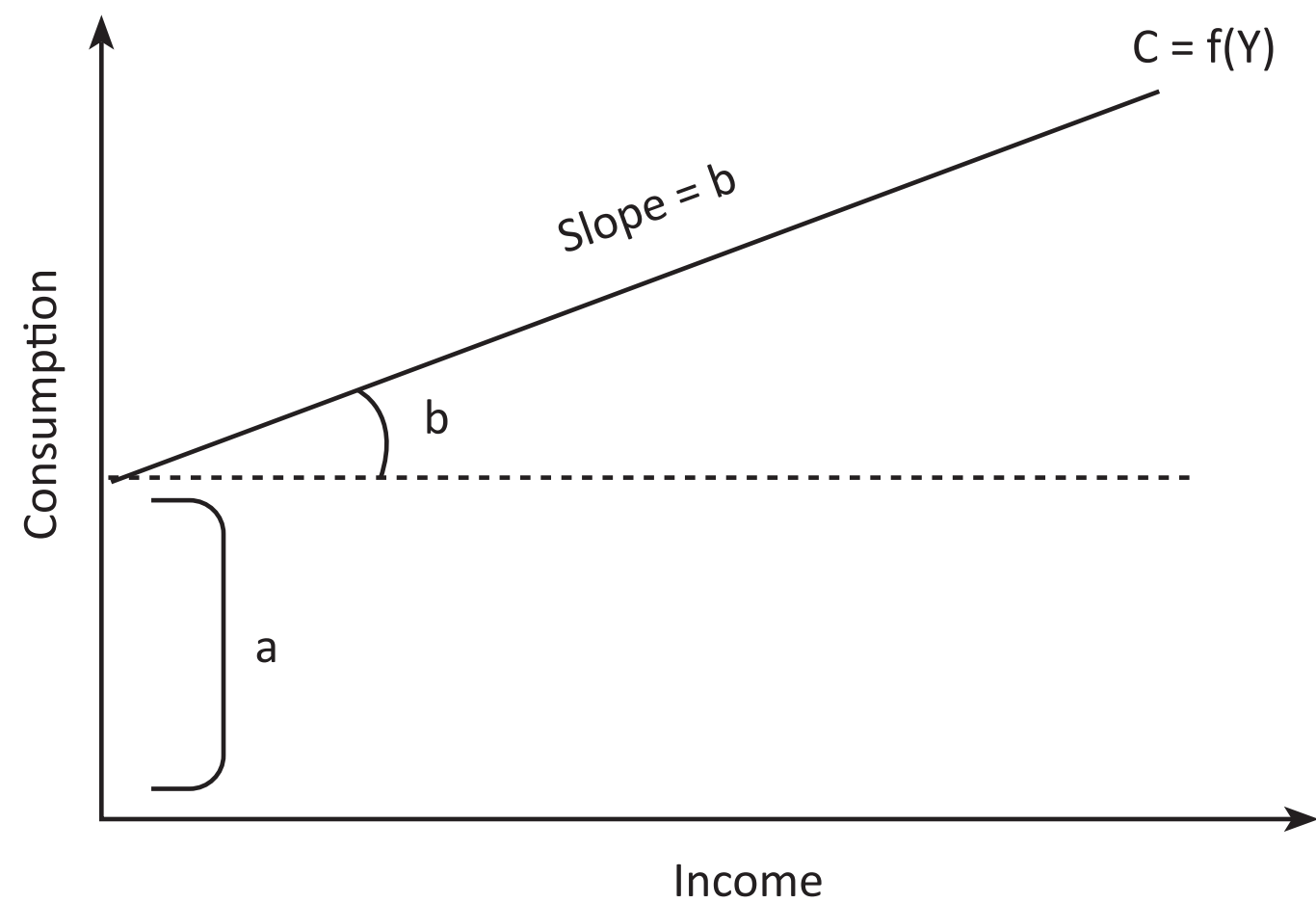
3. Keynesian Assumption

❖ **Consumption Increase <** the increase in disposable income.
❖ **MPC Condition:** 0 < b < 1 (Slope of consumption curve).
❖ **APC:** $\dfrac{C}{Y}$
❖ **APC:** Falls as income rises.

❖ **Income Equation:** Y = C + S
❖ **Saving Formula:** S = Y − C

4. Saving Function

4.1 Definition

❖ **Formula**: S = f(Y)

4.2 Saving Function (Propensity to Save)

$APS = \dfrac{S}{Y}$
$MPS = \dfrac{\Delta S}{\Delta Y}$
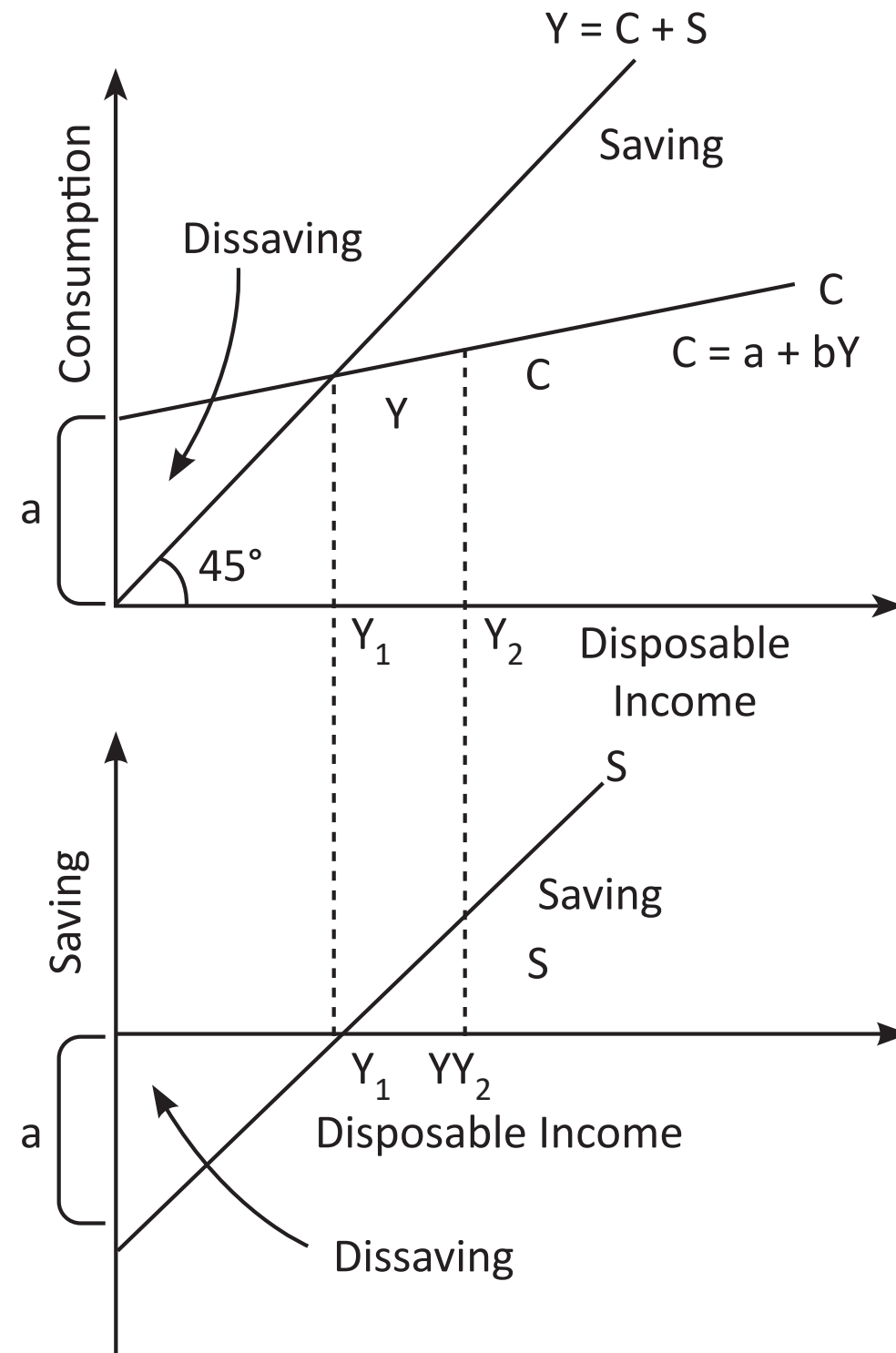
- ❖ 0 < MPS < 1
- ❖ MPC + MPS = 1
- ❖ APC + APS =1

5. TWO-Sector Model of National Income Determination

5.1 Equilibrium Output Determination

- ❖ **AD Function & AS Function** – Determines equilibrium output.
- ❖ **AD Curve** $\rightarrow$ Linear & positively sloped (AD $\uparrow$ as National Income $\uparrow$).
- ❖ **AE Line** $\rightarrow$ Flatter than the 45° line
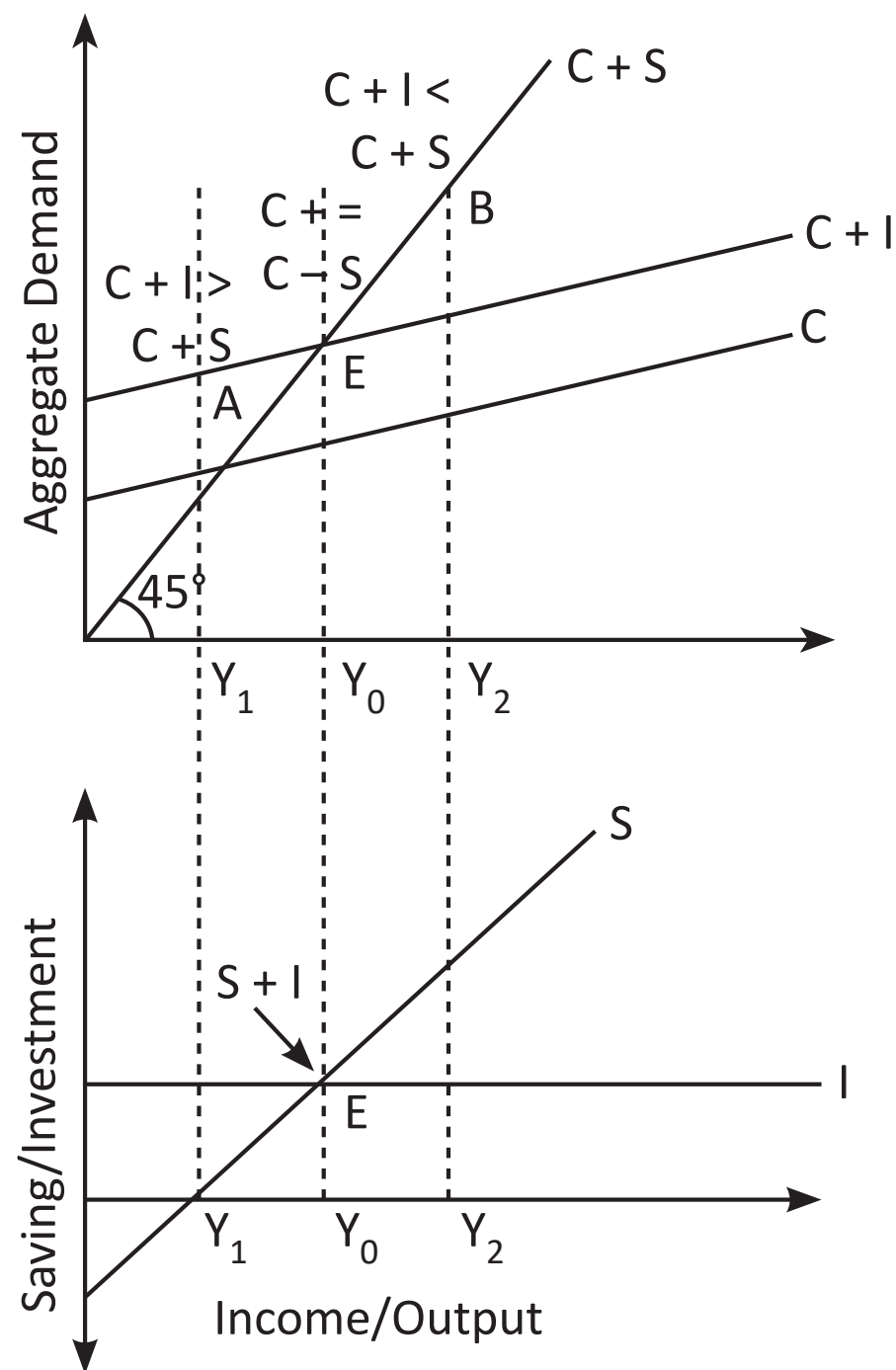
Determination of Equilibrium income: 2 sector model

5.2 Equilibrium in the Two-Sector Model

- ❖ 45° Line → Planned Aggregate Expenditure = Aggregate Output (Equilibrium).

- ❖ AD Below 45° Line → Planned AE < GDP (Excess SUPPLY)

- ❖ AD Above 45° Line → Planned AE > GDP (Excess Demand).

- ❖ Equilibrium Condition → AD = Output(AS) & Planned Investment = Savings.

5.3 Equilibrium with Unemployment and Inflation

- ❖ **Keynesian Equilibrium** → Occurs when Planned AE = Output, not necessarily at full employment.

5.4 Deflationary Gap

- ❖ Condition → AD < Full Employment Output (Deficient Demand).

- ❖ Impact → Leads to recessionary gap or contractionary gap.

- ❖ When? → Occurs during a business cycle downturn or recession.

Aggregate Demand — Output, Income

(C + I)₁, (C + I)₂ labels; points F, G, E; Deflationary Gap; 45°; M, Q
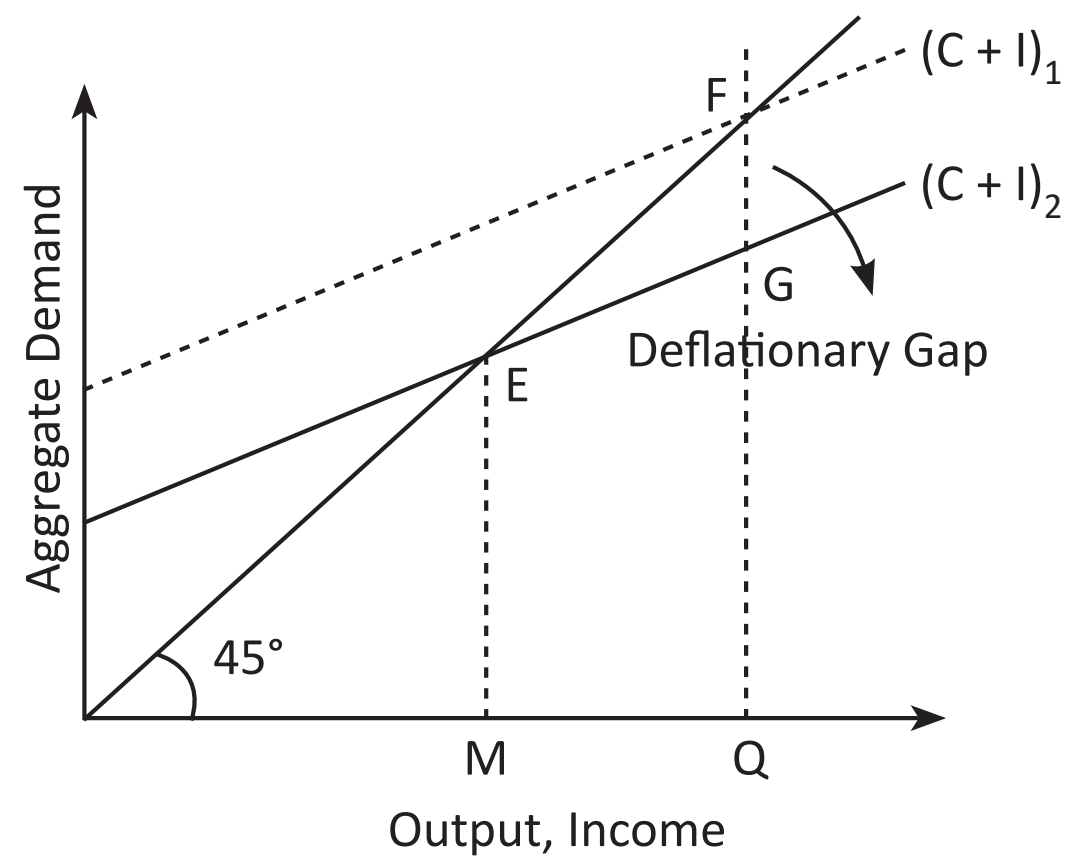
5.5 Inflationary Gap

❖ **Condition** → AD > AS at full employment output.

❖ **Cause** → Excess anticipated expenditure beyond full employment output.

❖ **Impact** → Leads to demand-pull inflation.

❖ **Definition** → Actual AD exceeds AD required for full employment equilibrium.

The graph shows Aggregate Demand on the vertical axis and Output, Income on the horizontal axis, with a 45° line from the origin, dashed line $(C+I)_1$ and solid line $(C+I)_2$, points E, G, F, and an Inflationary Gap marked, with Q and M on the horizontal axis.
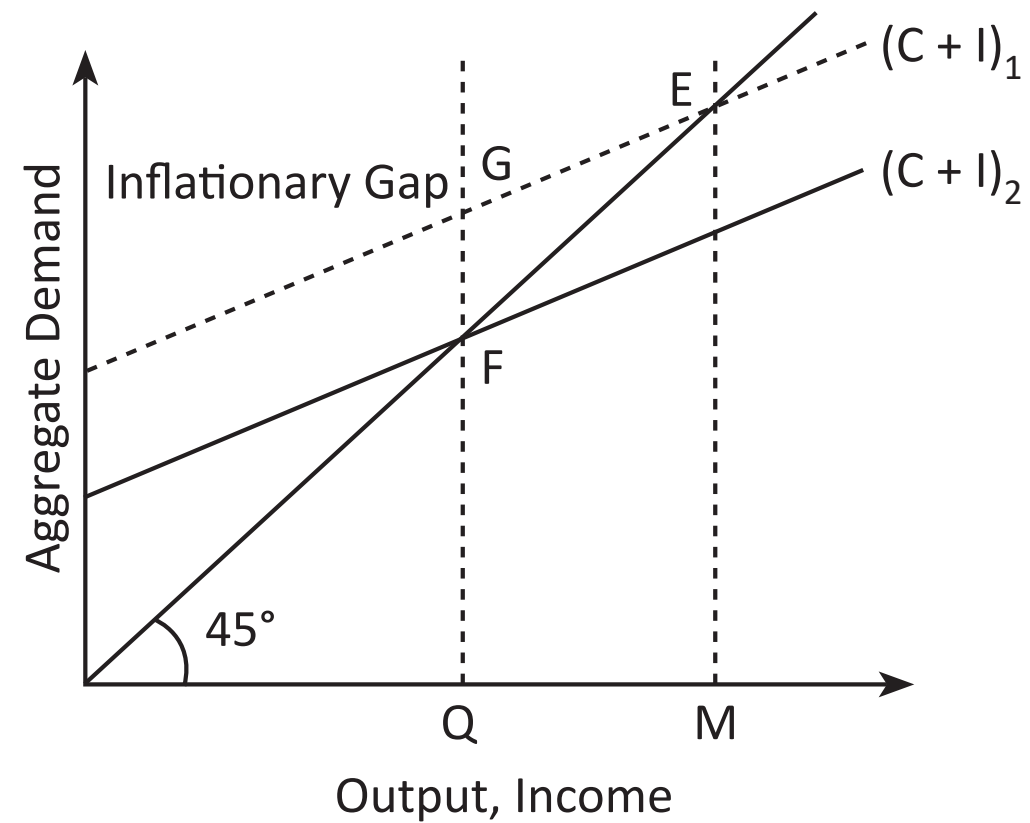
6. Investment Multiplier (K)

6.1 Definition →

Relationship between **initial investment increase** and resulting **aggregate income increase**.

Formula → $K = \dfrac{\Delta Y}{\Delta I}$
Impact → Higher **multiplier effect** → Greater **income generation**.

6.2 Multiplier and MPC

- **Higher MPC** = **Higher Multiplier**.

- **Formula**: $K = \dfrac{1}{1-MPC} = \dfrac{1}{MPS} = \dfrac{\Delta Y}{\Delta I}$

- **Max value of Multiplier**: Infinity (when MPC = 1 Or MPS = 0).

- **Min value of Multiplier**: 1 (when MPC = 0 or MPS =1).

- Multiplier & MPS are inversely related.

7. THREE-Sector Model of National Income Determination

7.1 Three Sector Economy

- Household + Business + Government Sector

- **AD** = C + I + G

- **AS** = C + S + T

7.2 Equilibrium Output Determination

- Equilibrium Condition: **AD = AS** or **I + G = S + T**

- Tax multiplier $= \dfrac{1}{1-b(1-t)}$

7.3 Determination of Equilibrium Income: Three Sector Model
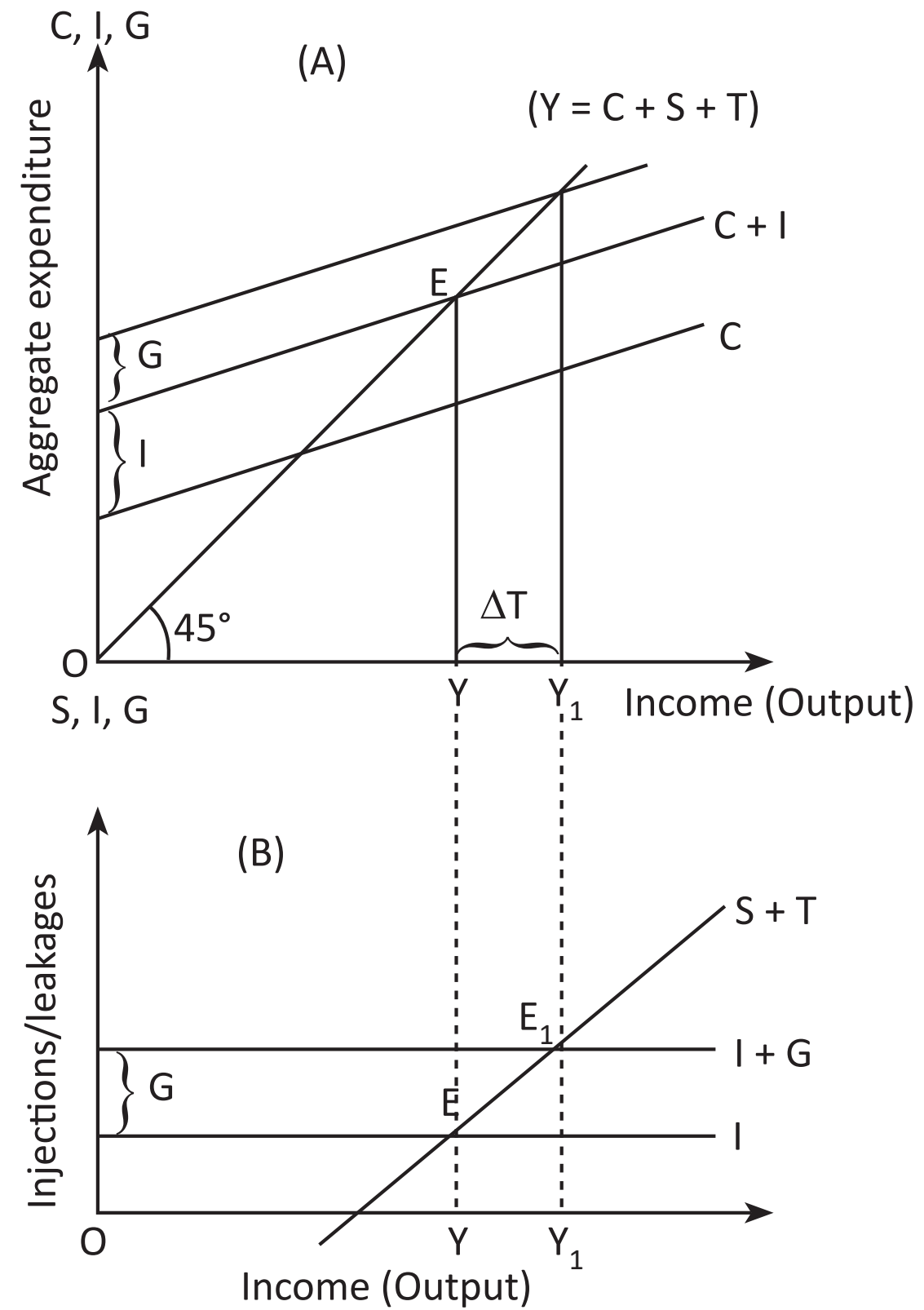
7.4 Government Sector & Income Determination

> ❖ Govt impacts income via **taxes**, **transfer payments**, and **spending**.

7.5 Income with Lump Sum Taxes

Lump sum taxes: Fixed taxes, regardless of income.
Balanced Budget: **G = T**
No transfer payments.

7.6 Consumption Function can be Expressed as Following

$C = a + bY_d$
When, $Y_d = Y - T$

7.7 Income Determination with Lump Sum Taxes and Transfer Payments

$C = a + bY_d$
When, $Y_d = Y - T$

Consumption function $- C = a + bY_d$

$Y_d = Y - T + TR$

$C = a + b(Y - T + TR)$

$Y = a + b(Y - T + TR) + I + G$

$Y(1 - b) = a - bT + bTR + I + G$

$Y = \dfrac{1}{(1-b)}(a - bT + bTR + I + G)$

7.8 Income Determination with Tax as a Function of Income

$T = \overline{T} + tY$

$Y = C + I + G$

$Y = a + bY_d + I + G$

$Y = a + b(Y - \overline{T} - tY) + I + G$

$Y = a + bY - b\overline{T} - btY + I + G$

$Y - bY + btY = a - b\overline{T} + I + G$

$Y(1 - b - bt) = a - b\overline{T} + I + G$

$= \dfrac{1}{1 - b(1 - t)}(a - b\overline{T} + I + G)$

7.9 Income Determination with Taxes as a function of income, Govt. Expenditure and Transfer Payments

$$C = a + b(Y - \overline{T} - tY + TR)$$

$$Y = a + b(Y - \overline{T} - tY + TR) + I + G$$

$$Y = \frac{1}{1 - b(1 - t)}(a - b\overline{T} + bTR + I + G)$$

8. FOUR-Sector Model of National Income Determination

Sector Involved in 4 Sector Model

Household	Business	Government	Foreign

Additional Flows of The Model are

Exports	Import	Net Capital flow (Capital outflow – capital inflow)
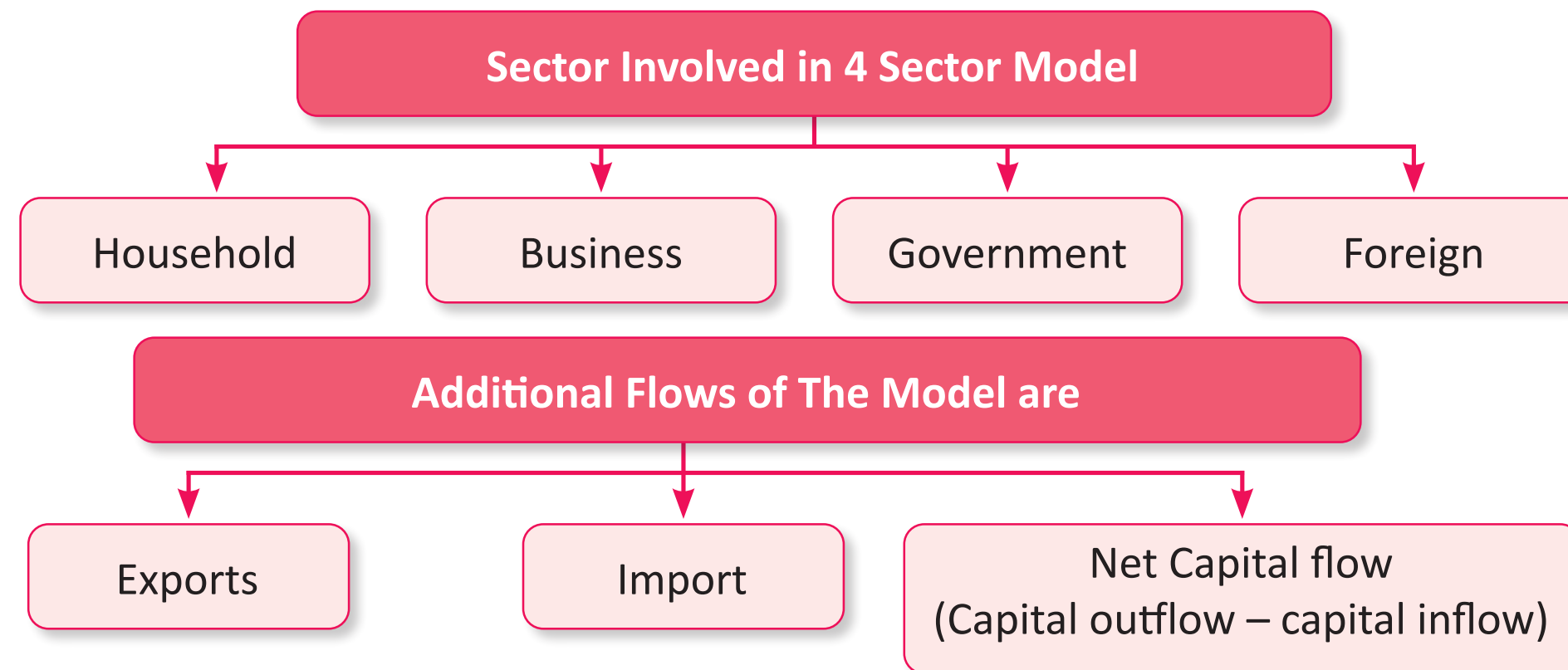
8.1 Four Sector Model

Household + Business + Government + Foreign Sector

AD = C + I + G + (X − M)
AS = C + S + T

8.2 Equilibrium Output Determination

❖ **AD = AS**   or **I + G + X = S + T + M** (Foreign trade multiplier = $\dfrac{1}{1-b+m}$)

Determination of Equilibrium Income: Four Sector Model

8.3 Demand for Exports

```
                    ┌─────────────────────┐
                    │  Demand for Exports │
                    └─────────────────────┘
                               │
         ┌─────────────────────┼─────────────────────┐
         ▼                     ▼                     ▼
┌─────────────────┐  ┌─────────────────┐  ┌─────────────────┐
│   Depends on    │  │  Exogenously    │  │   Autonomous    │
│ foreign income  │  │   determined    │  │                 │
└─────────────────┘  └─────────────────┘  └─────────────────┘
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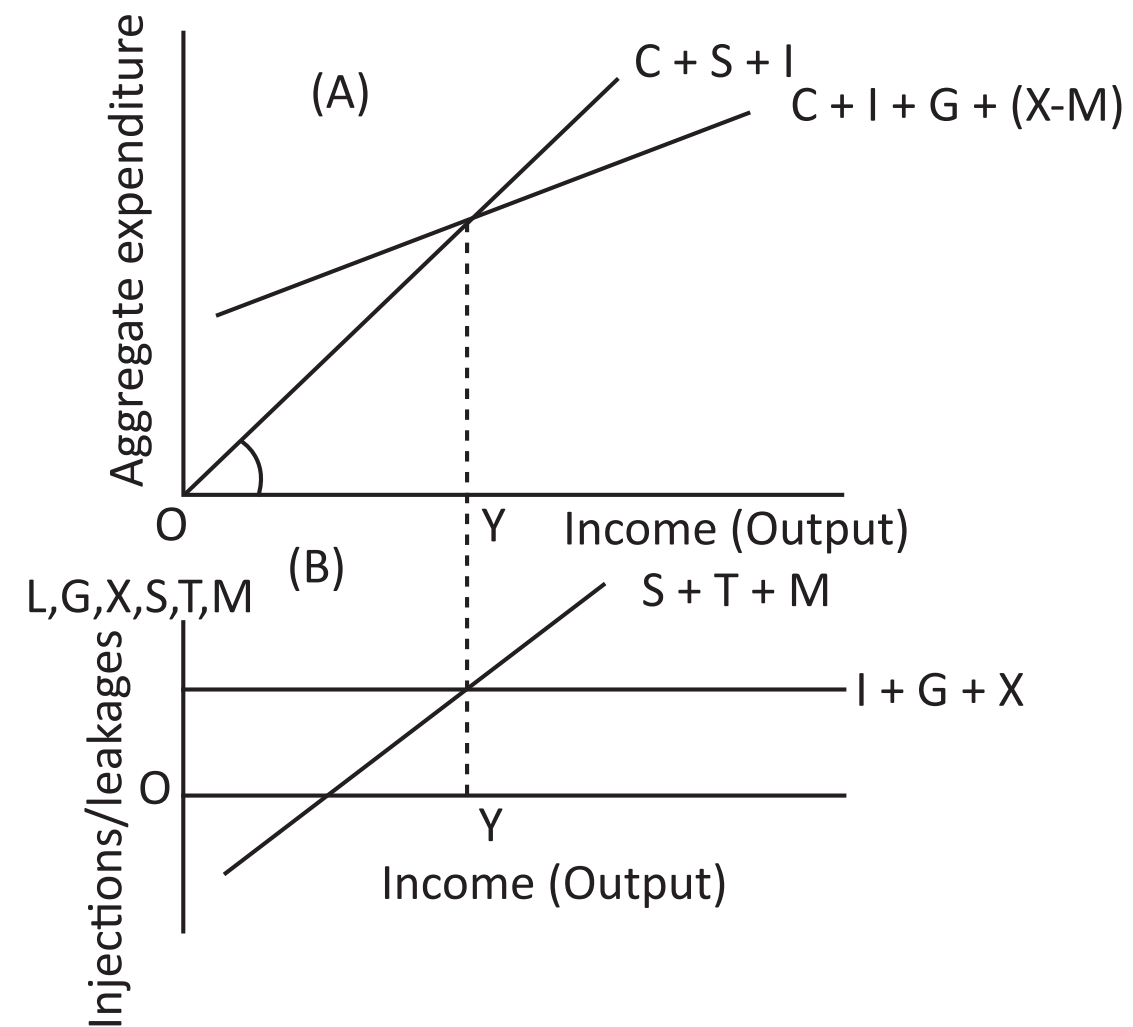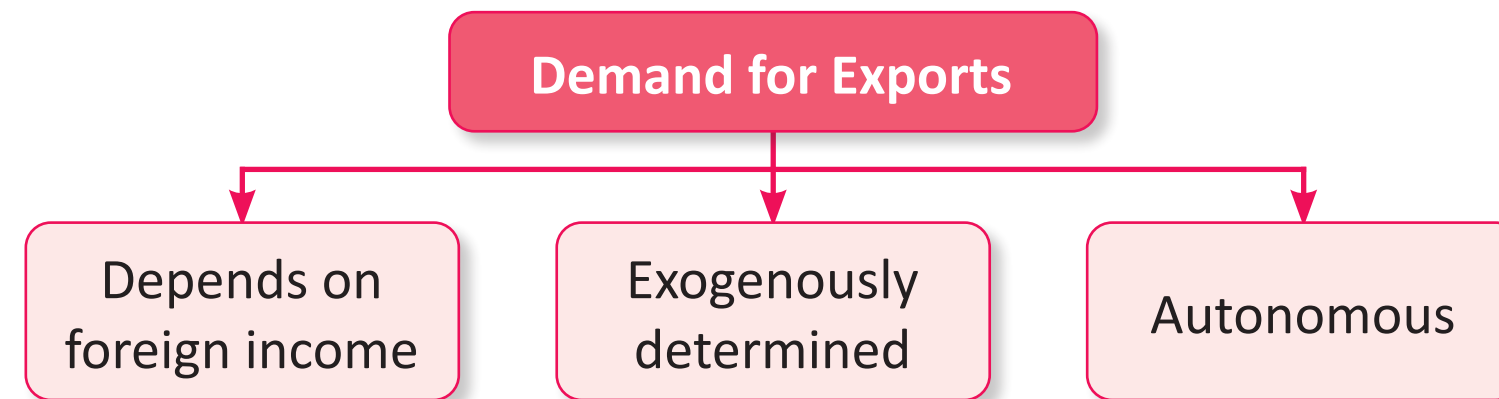
8.4 Demand for Imports

❖ Depends on marginal propensity to import (M)

❖ $\overline{M}$ = Autonomous import

❖ m = Marginal propensity to import

❖ Y = National income

8.5 Equilibrium level of National Income

$Y = C + I + G + (X - M)$

$Y = a + b(Y - T) + I + G + X = \overline{M}$

$Y = \dfrac{1}{1 - b + m}(a - bT + I + G + X - \overline{M})$

❖ Leakages = S + T + M; Injections = I + G + X

9. LEAKAGE and INJECTIONS in different SECTORS

Model	Leakages	Injections
2 Sector	Savings	Investment
3 Sector	Savings + Taxes	Investment + Govt. Exp.
4 Sector	Savings + Taxes + Imports	Investment + Govt. Exp. + Exports

PUBLIC FINANCE

- **Unit 1: Fiscal Functions: An Overview, Centre and State Finance**
- **Unit 2: Market Failure/Government Intervention to Correct Market Failure**
- **Unit 3: The Process of Budget Making: Sources of Revenue, Expenditure Management and Management of Public Debt**
- **Unit 4: Fiscal Policy**

Unit 1

FISCAL FUNCTIONS: AN OVERVIEW, CENTRE AND STATE FINANCE

1. Introduction

1.1 The primary goal of the state is to promote general welfare of the society.

There are 3 main macroeconomic **goals:**

1.	Economic growth.
2.	High levels of employment.
3.	Stable price levels.

1.2 Adam Smith Supports Limited Government Role

❖ Defense → Protecting the nation.
❖ Justice System → Ensuring law & order.
❖ Public Infrastructure → Development of roads, railways, ISRO etc

2. Richard Musgrave, in his Classic Treatise 'The Theory of Public Finance' (1959), Introduced the Three-branch Taxonomy of the Role of Government in a Market Economy

```
                    ┌─────────────────────────────┐
                    │   Fiscal Functions/Public   │
                    │      Finance Functions      │
                    └─────────────────────────────┘
           ┌────────────────┬────────────────────┐
           ▼                ▼                    ▼
 ┌──────────────────┐ ┌──────────────────┐ ┌──────────────────────┐
 │ Resource Allocation │ Income Redistribution │  Macro Economic     │
 │   (Efficiency)    │ │    (Fairness)    │ │ Stabalisation (Price  │
 │                  │ │                  │ │    Stability)         │
 └──────────────────┘ └──────────────────┘ └──────────────────────┘
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> The allocation and distribution functions are primarily microeconomic functions, while stabilization is a macroeconomic function.
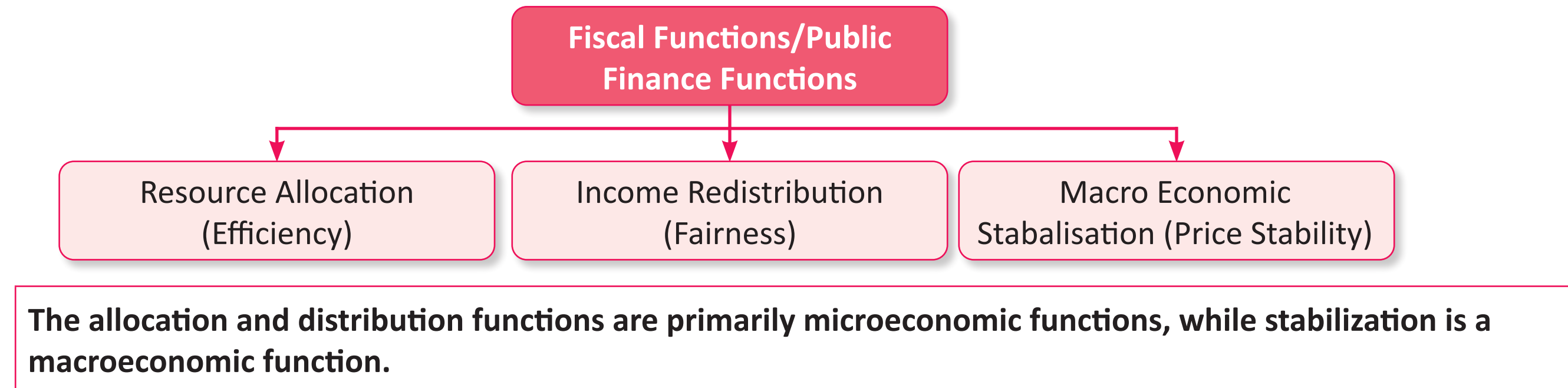
3. Allocation Function

3.1 It Involves

- ❖ Distribution of limited resources among various uses
- ❖ Determines goods and services produced in the economy
- ❖ Challenge - addressing unlimited wants with limited resources

3.2 Market Failure

- ❖ A situation where goods are under-provided or over-provided due to inefficiencies.
- ❖ Misallocation of resources is market failure.

- ❖ **Demerit good** → Over production
- ❖ **Public & merit goods** → under-provided
- ❖ **Missing or non-existent markets** are common

3.3 Causes of Market Failure

- ❖ **Imperfect Competition** → Monopoly power leads to low production & high prices
- ❖ **Public Goods** → Markets fail to provide collective goods (e.g., defense)
- ❖ **Incomplete Markets** → Underproduction of merit goods (e.g., education, healthcare)
- ❖ **Resource Misuse** → Overuse & depletion of natural resources
- ❖ **Externalities** → Negative effects on third parties (e.g., pollution)

3.4 Instruments for Resource Allocation (Allocation Instruments)

- ❖ Direct production (economic goods, e.g. electricity)
- ❖ Price mechanism may be used by the govt.i.e affecting price through tax & subsidies
- ❖ Legislation like the ban of single-use plastic
- ❖ Competition & merger policies
- ❖ Regulatory activities like licensing, minimum wages etc.
- ❖ Legal & administrative frameworks

4. Redistribution Function

4.1 Meaning

- ❖ Govt's intervention for fair redistribution (income & wealth)
- ❖ Related to **'for whom'** to produce in an economy

4.2 Aims

- ❖ **Equitable** distribution of societal output among households
- ❖ **Social welfare** enhancement
- ❖ **Income & Wealth Equality** → Security & improved living standards

4.3 Examples

- ❖ Tax the rich, subsidise the poor
- ❖ Tax proceed used to finance services for low-income groups
- ❖ Employment reservations, unemployment benefits,
- ❖ Special schemes for backward regions
- ❖ Monetary aid to poor families

5. Stabilisation Function

5.1 Stability Exists when Economies

❖ Output matches production capacity
❖ Total spending matches total output
❖ Labour resources fully employed
❖ Inflation $\rightarrow$ low & stable

5.2 Keynesian Theory

❖ **Market Economy** $\rightarrow$ Doesn't achieve full employment & price stability alone
❖ **Govt Intervention** $\rightarrow$ Needed to counter business cycles & prevent prolonged inflation/recession
❖ **Govt Tools** $\rightarrow$ Monetary Policy & Fiscal Policy to regulate demand

5.3 Key Challenges

❖ Stagflation
❖ Contagion Effect
❖ Prolonged Instability
❖ Unresolved Disruptions

5.4 Role of Fiscal and Monetary Policy

❖ Fiscal Policy → Controls economic fluctuations via govt. spending & taxation

	Govt. Expenditure	Taxes
Recession	Increases	Decreases
Inflation	Decreases	Increases

Budget Surplus	Budget Deficient
Simulates economic activity	Shows down economic activity

6. Centre and State Finance

6.1 Meaning

❖ **Fiscal Federalism (Richard Musgrave)** → Division of govt. functions & financial relations

❖ **Central Govt.** → Economic stabilization & income redistribution

❖ **State & Local Govt.** → Resource allocation

6.2 Federal Structure

Institutional Arrangement

Central Govt. (National Level)

State Govt. (Regional Level)

Independent Judiciary

Power Distribution Through Lists As Per Article 246

Central List
Central Legislation

State List
State Legislation

Concurrent List
Center + State Legislate

❖ In case of conflicting legislation in the concurrent list, the decision of centre prevails.
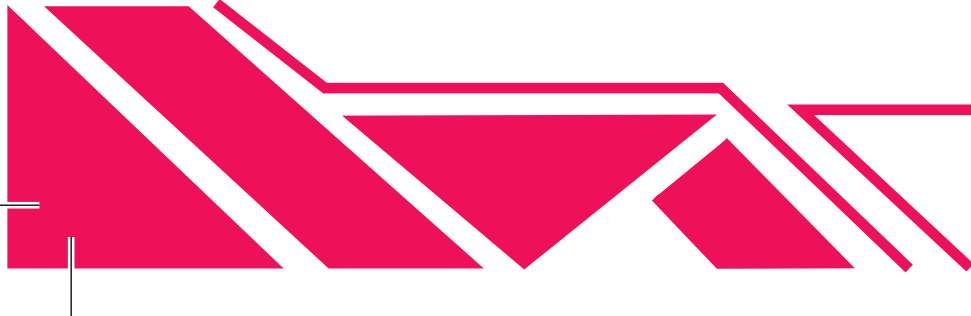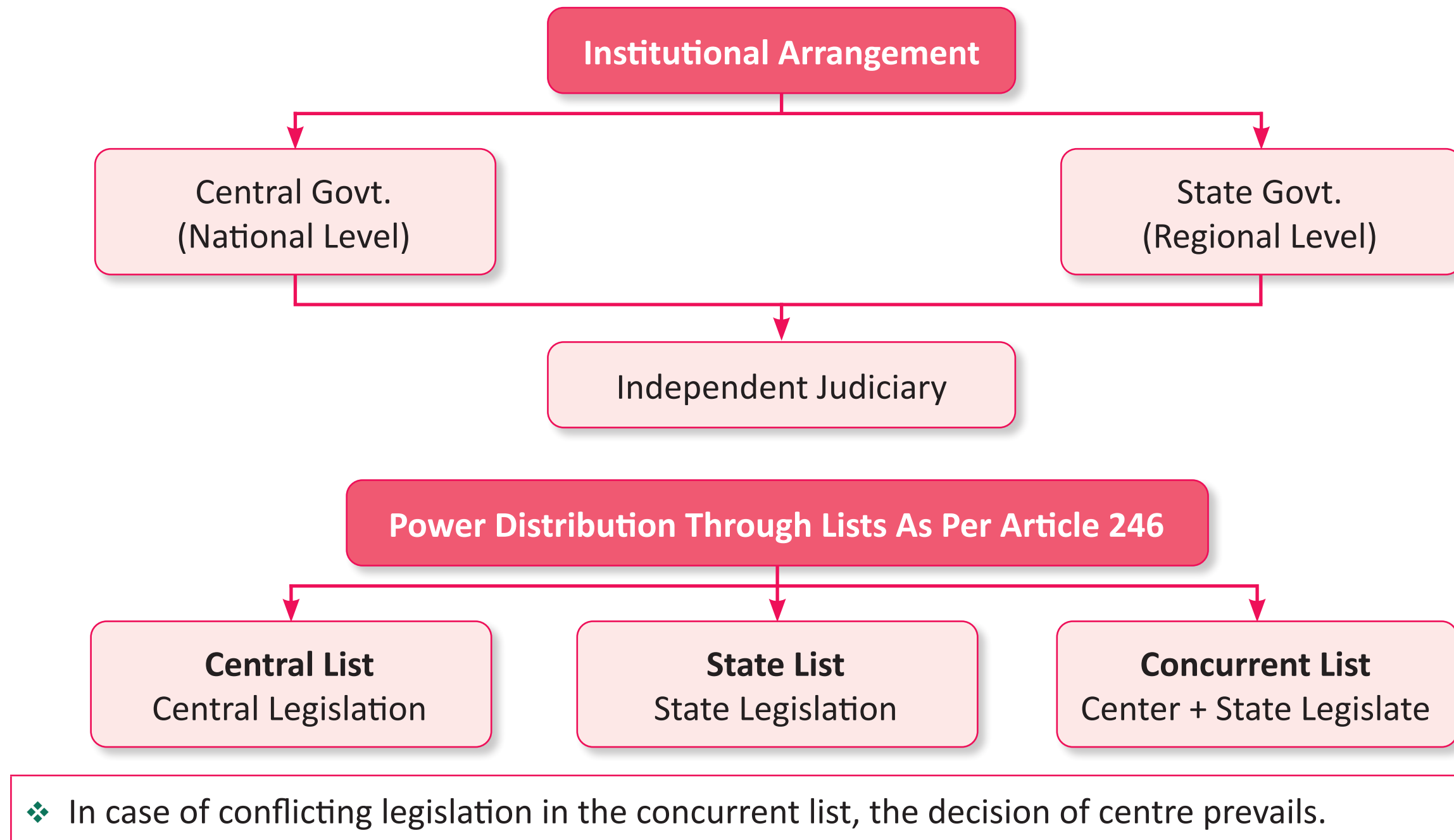
6.3 Revenue Expenditure Allocation

- ❖ **Key in a federation** → Clear division of revenue sources
- ❖ **Both Centre &** State levy taxes
- ❖ **Centre's revenue sources** → Income tax, central GST, etc.
- ❖ **State's revenue sources** → Agriculture, electricity, mineral rights, etc

Article 268	Duties levied by the union but collected and appropriated by states.
Article 269	Taxes levied and collected by the union but assigned to the states.
Article 270	Surcharge on certain duties and taxes for purposes of the union
Article 271	Taxes levied and collected by union & distributed between union and states as prescribed in clause 2nd States.
Article 275	Statutory Grants - in-aid from the union to certain states.
Article 282	Grants for any public purpose
Article 293	Loans for any public purpose

6.4 Finance Commission (Article 280)

- ❖ Facilitates transfer of resources (financial between centre and state)
- ❖ **Functions:**
  - ○ Tax sharing between centre & state

○ Determination of principles and quantum of grants-in-aid to states
○ Recommends President regarding financial decisions
○ President's recommendation in the interests of sound finance.

6.5 Criteria of Distribution of Centre Taxes

❖ Income distance
❖ Area
❖ Tax & Fiscal efforts
❖ Population
❖ Demographic performance
❖ Forest & ecology

6.6 15th Finance Commission

Formed: November 2017
Key Recommendation:
States to receive **41%** of central taxes (2021-2026)
Additional **1%** for newly formed UTs (e.g., **J&K**)

6.7 Introduction of GST (1 July 2017)

GST	Goods and Service Tax
SGST	State Goods and Service Tax
IGST	Integrated Goods and Service Tax
CGST	Central Goods and Service Tax

○ Aim – consolidated indirect taxes

6.8 Supreme Court Verdict May 2022

❖ **Union & State** legislatures have **equal** powers to make laws on **GST**
❖ **GST Council** recommendations are **not binding**

6.9 GST Compensation

❖ **Fund created to** compensate state's **revenue losses**
❖ Initially **for 5 years, extended** due to **pandemic slowdown**
❖ **Cess** imposed on **luxury & demerit goods,** proceeds go to **compensation fund**

6.10 Expenditure Decentralization

It Assigns Responsibilities

Central Govt. Defense, forgein affairs etc.	**State Govt.** Agriculture, social, services	**Local Govt.** Public utilities
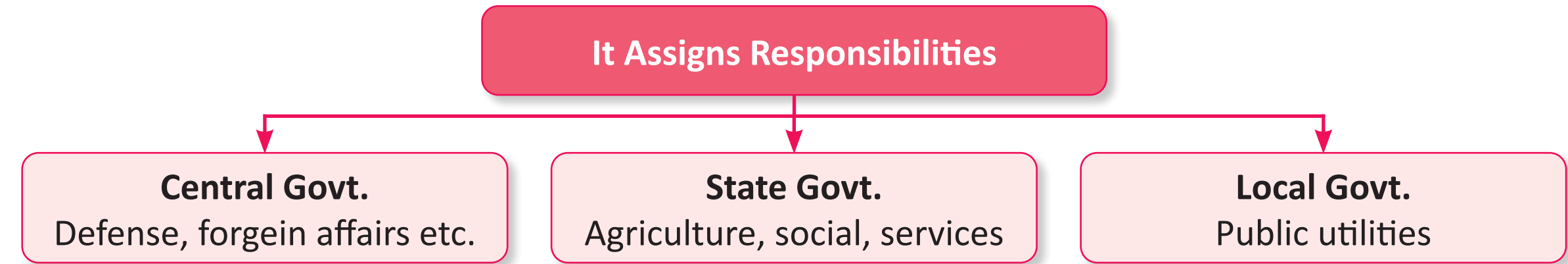
Borrowing (Article 292/293)	
Central Govt.	❖ Within limit set by parliament ❖ Guarantee upon securities of consolidated funds of India
State Govt.	❖ Within limits of state legislation ❖ Provide guarantee + obtaining center's consent in case of previous loan
Centre's Role in State Borrowing	❖ Within limits fixed under Article 292 ❖ Give guarantees in respect of loans raised by the states

2 Unit

MARKET FAILURE/GOVERNMENT INTERVENTION TO CORRECT MARKET FAILURE

1. Market Failure

❖ Inefficient allocation of resources

❖ The market doesn't function optimally, but still functions

2. Why Market Fails?

2.1

```
                    Reasons of Market Failure
        ┌──────────────┬──────────────┬──────────────┐
   Market Power    Externalities   Public Goods    Incomplete
                                                   Information
```

1. Market Power
❖ It is monopoly power where firms raise **prices above marginal cost**
❖ Price makers restrict output

❖ Efficiency < Price domination
2. Externalities
❖ **Indirect effects** on third parties
❖ **Not reflected** in market prices
❖ Also called **spillover effects, side effects, third parties effect**
❖ **Types: Positive** (Conferring benefits on another party) & **Negative** (Conferring costs on another party)
3. Public Goods
❖ Non-rival & non-excludable
❖ Cannot be **divided** (e.g., parks, streetlights)
❖ **Other names:** collective consumption goods, social goods
4. Incomplete Information
❖ **Lack of market knowledge** leads to inefficiency
❖ **Complexity of products/services**
❖ **Deliberate misinformation** (ads)

2.2 Production Externalities

Positive	Negative
Unconsidered benefits → Lower cost	**Unaccounted costs** → Higher price
Example: Garden enhances surroundings	**Example:** Pollution reduces fish output
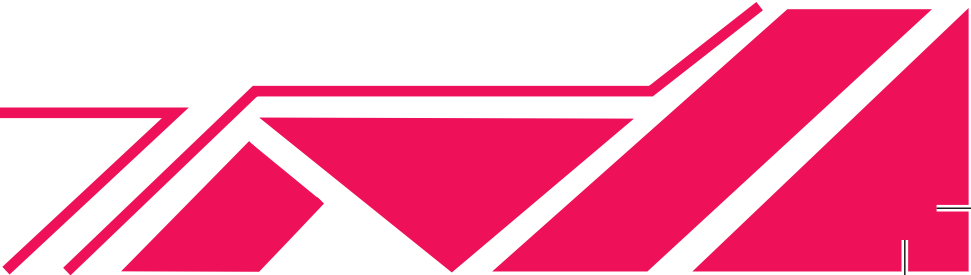
2.3 Consumption Externalities

Positive	Negative
Benefits others unintentionally	**Harmful impact on others**
Example: Vaccination $\rightarrow$ Prevents infection	**Example:** Public smoking $\rightarrow$ Passive smoking

2.4 Positive Consumption Externality (PCE)

- ❖ **PCE received in Consumption:**
  - ○ Eg- If people get immunized against contagious diseases, they would confer a social benefit to others as well by preventing others from getting infected.
- ❖ **PCE Received in Production:**
  - ○ Eg- Consumption of the services of a health club by employees of a firm would result in an external benefit to firm in form of increased efficiency and productivity.

2.5 Positive Production Externality (PPE)

- ❖ **PPE received in production:**
  - ○ Eg- Firms provide training on skills that employees take beyond that job.
- ❖ **PPE received in consumption:**
  - ○ Eg- When an individual raises/produces an attractive garden and the persons walking by enjoy the garden.

2.6 Negative Consumption Externality (NCE)

❖ **NCE received in production:**

  ○ Eg- The act of undisciplined students talking and creating disturbance in a class preventing teachers from making effective instruction and the case of excessive consumption of alcohol causing impairment in efficiency for work and production are instances of negative consumption externalities affecting production.

❖ **NCE received in consumption:**

  ○ Eg- smoking cigarettes in public place causing passive smoking by others.

2.7 Negative Production Externality (NPE)

❖ **NPE received in production:**

  ○ Eg- Factory discharges untreated waste into a nearby river and pollutes the water, which affects fish output as there will be less catch for fishermen due to loss of fish.

❖ **NPE received in consumption:**

  ○ Eg- Factory discharges untreated waste into a nearby river and pollutes the water causing health hazards for people who use the water for drinking and bathing.

2.8 Effect of Externalities on Efficiency and Market Failure

Type	Meaning	Example
Private Cost	Firm's direct expenses	Wages, raw materials
External Cost	Unaccounted societal impact	Pollution
Social Cost	Total burden on society	Private Cost + External Cost

2.9 Market Failure in Public Goods

❖ **Free Rider Problem:** People benefit without paying.
❖ **Profit-Maximizing Firms:** Produce only if they can charge a price.
❖ **Under-Production:** Leads to insufficient or no supply, causing market failure.

3. Private vs. Public Goods

Private Goods	Public Goods
Scarce, must be purchased	Free for all, no direct payment
Excludable: Only paying consumers can use	**Non-excludable:** Can't prevent non-payers from use
Rival: One's use reduces availability	**Non-rival:** One's use doesn't reduce availability
Example: Cars, food	**Example:** Parks, streetlights

4. Asymmetric Information (Inside Incomplete Information)

4.1 Asymmetric Information

- ❖ Happens when there's an imbalance of info between the buyer and seller.

- ❖ **Examples:** Second-hand car market, landlords and tenants.

- ❖ Leads to **Adverse Selection** and **Moral Hazard**.

4.2 Adverse Selection (Seller Knows More than Buyer)

- ❖ Occurs when buyers can't distinguish between low-risk and high-risk individuals due to lack of info.

- ❖ **Example:** Health insurance companies offering low premiums to low-risk buyers, while high-risk individuals are attracted to the plan.

4.3 Lemon Problem

- ❖ It is used in car markets, given by George Akerlof

4.4 Adverse Selection Causes Market Failure

- ❖ Leads to the **elimination of high-quality goods.**

- ❖ Economic agents may choose **sub-quality goods** or exit the market.

- ❖ **Low-quality goods** dominate, reducing overall market efficiency

4.5 Moral Hazard

- ❖ Occurs when economic agents shift costs to others.
- ❖ Takes advantage of less-informed parties.
- ❖ **Example:** Insurance market leads to **increased risk-taking** by policyholders, causing inefficiency & distrust

4.6 Combating Market Failure - Govt is providing these by itself

- ❖ **Legal & regulatory frameworks**
- ❖ **Infrastructure** (roads, airports, etc.)
- ❖ **Enforcing competition**
- ❖ **Consumer protection laws**

5. Government Interventions to Correct Market Failure

Government Interventions to Correct Market Failure

- Minimize Market Power
- Correct Externalities
- Merit & Demerit Goods
- Correcting Information Failure
- Equitable Distribution
- Public Goods
- Price Goods Intervention
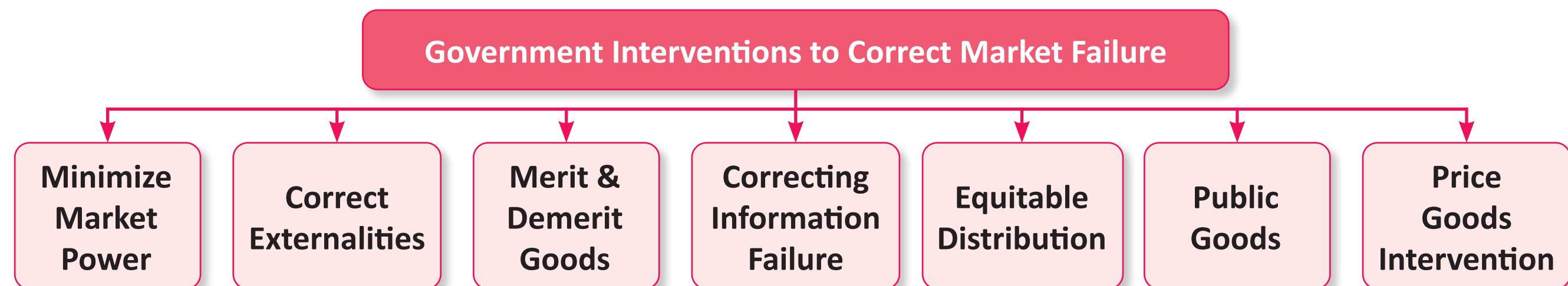
The Indian Competition Act, 2002 (amended in 2007) promotes market competition through:

- ❖ Market liberalization (e.g., telecom)
- ❖ Controls on mergers & acquisitions (avoid domination)
- ❖ Price capping & regulation
- ❖ Profit & rate of return regulation
- ❖ Patronage to consumer associations
- ❖ Restrictions on monopoly powers
- ❖ Investigating unfair practices
- ❖ Reduction in import controls
- ❖ **Restrictions on monopsony power** of firms

6. Government Interventions to Correct Externalities

6.1 Towards Negative Externalities

A. Direct control or command solution (bans harmful activities)

- ❖ **Example:** Smoking banned in many places
- ❖ **Example:** Restrictions on certain commodities
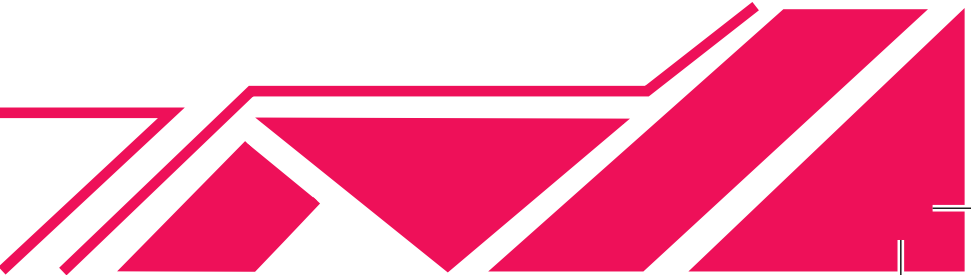
B. Market-based policies
❖ Pollution taxes/pigouvian taxes
❖ Cap and trade system (limits emissions, tradeable permits)

6.2 Towards Positive Externalities

○ Corrective subsidies to consumers & producers
○ Direct govt. production (e.g., health services, where govt. becomes the producer)

7. Government Interventions in case of Public Goods

7.1

1. Some public goods are provided solely by the government:
❖ Defense
❖ Fire protection
❖ Legal system
❖ Atomic energy, nuclear power

2. For excludable public goods (where entry fees can be charged), the government can:
❖ Provide goods itself & charge entry fees (financing costs)
❖ Grant licenses to private firms for public good facilities

7.2 Government Interventions in case of Merit Goods

❖ Merit Goods →
- These are socially desirable goods, gives positive externalities.
- For example – education, healthcare, welfare services, public libraries, housing fire protection etc.

❖ Government Measures →
- Compulsory Insurance Protection
- Compulsory Immunization
- Use of legislation (Eg. Use of helmets, Seatbelts)
- Free Education
- Free Medical Services

8. Government Interventions in Case of Demerit Goods

8.1 Demerit Goods

❖ Socially undesirable

❖ High negative externalities in consumption

❖ **Examples:** Tobacco, Alcohol, Intoxicating drugs, Narcotics

8.2 Government Measures

1.	Complete Prohibition/Ban
2.	**Persuasion:** Negative advertising campaigns to highlight risks (e.g., anti-cigarette campaigns)
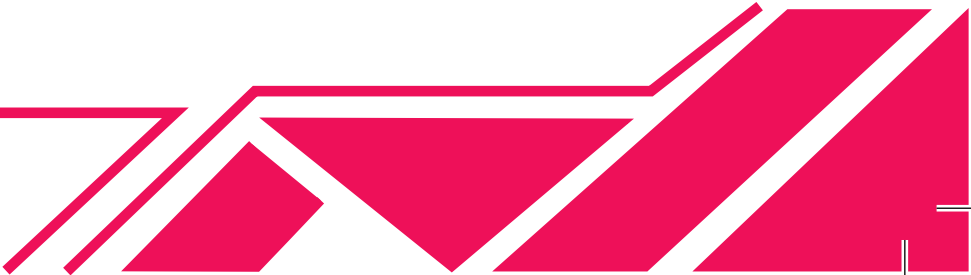
3.	**No Promotion:** Prohibiting advertising or promotion of demerit goods
4.	Time & Space Restrictions (e.g., no selling at certain hours or locations)
5.	Higher Tax Rates
6.	Price Controls

9. (Other) Government Interventions

9.1 Non-Market Pricing

❖ **Price Flooring** (minimum price)
❖ **Ceiling Price** (maximum price)
❖ **Minimum Wages, Rent Controls**
❖ **Minimum Support Price (MSP)**

9.2 Information Failure

❖ **Mandatory Labeling/Content Disclosure**
❖ **Disclosure of Information**
❖ **Public Dissemination (spreading goods info)**

9.3 Inequitable Distribution

❖ **Redistribution Policy** (progressive income taxation)
❖ **Combating Black Economy**
❖ **Ensuring Equity (e.g., land reforms)**
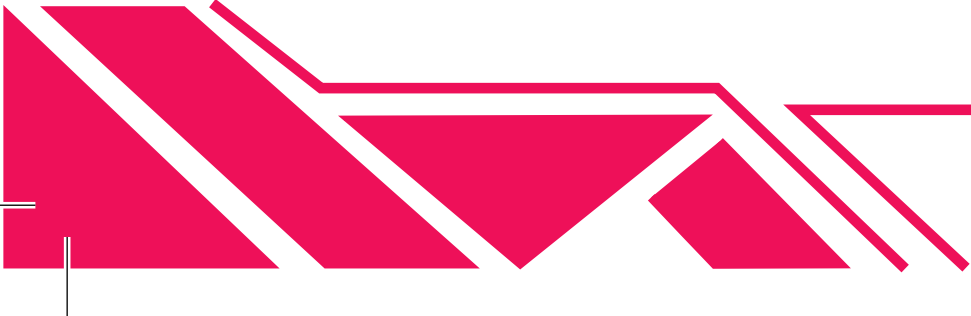
THE PROCESS OF BUDGET MAKING: SOURCES OF REVENUE, EXPENDITURE MANAGEMENT AND MANAGEMENT OF PUBLIC DEBT

1. Budget

1.1 Definition

- ❖ A **powerful financial policy instrument** outlining estimated revenues and receipts of the government during a fiscal year.
- ❖ The process of creating a budget is called **budgeting.**
- ❖ The term **'budget'** is not mentioned in the Indian Constitution; instead, **Article 112** refers to the **Annual Financial Statement.**

1.2 Types of Budget

- ❖ Balanced Budget (Expenditure = Revenue)
- ❖ Unalanced Budget (Expenditure ≠ Revenue)

```
                    ┌─────────────────────────┐
                    │  Expenditure ≠ Revenue  │
                    └─────────────────────────┘
                         │                 │
              ┌──────────┘                 └──────────┐
              ▼                                       ▼
     ┌─────────────────┐                    ┌─────────────────┐
     │  Surplus Budget │                    │  Deficit Budget │
     └─────────────────┘                    └─────────────────┘
              │                                       │
              ▼                                       ▼
   ┌────────────────────────┐            ┌────────────────────────┐
   │ Expenditure < Revenue  │            │ Expenditure > Revenue  │
   └────────────────────────┘            └────────────────────────┘
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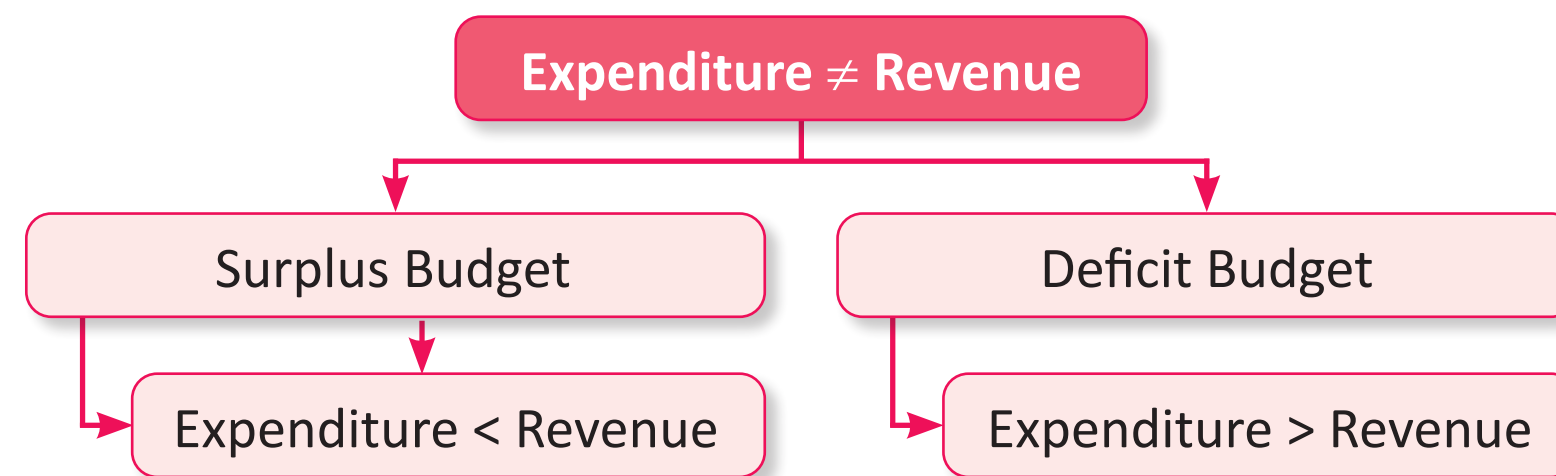
2. The Process of Budget Making

2.1 Budget Preparation Process

1.	**Ministry of Finance + NITI Aayog** + Other relevant ministries work together to prepare the budget.
2.	**Budget Division** sends out the **budget circular.**
3.	**Ministries, States, and UTs** are asked for detailed expenditure estimates.
4.	Suggestions on the budget are compiled.
5.	**Ministry of Finance** presents the budget in **Lok Sabha.**

2.2 Budget Speech (2 parts)

Part A: Present macro-economic situation, estimates for the next fiscal year, expenditure allocations, and new schemes.
Part B: Details of government progress on developmental measures, future policy directions, and tax proposals.

2.3 Key Documents

(i) **Annual Financial Statements (AFS)**
(ii) **Demand for Grants (DG)**
(iii) **Finance Bill**
(iv) Statements as per **FRBM Act 2003:**
❍ **Macro-Economic Framework Statement**
❍ **Medium Term Fiscal Policy Cum Fiscal Policy Strategy Statements**
(v) **Nine additional explanatory documents supporting the mandated ones.**

❖ **Annual Financial Statements (AFS) includes following 3 accounts of government-**

1. Consolidated Fund of India (Money can be spent through this fund only if appropriated by the parliament)
2. Contingency Fund of India (meet unforeseen expenditure by the President and does not require legislative approval.)
3. Public Account (Provident Funds and Small Savings, does not belong to govt., govt spends from this without parliament approval)

2.4 Budget Discussions

1.	**General Budget:** ⊙ Discussion in Parliament, then adjourned for standing committee review of **DG.**
2.	**Demand for Grants (DG):** ⊙ DG voting in Lok Sabha, can **cut/reduce** grants. ⊙ Budget then presented in **Rajya Sabha** (no DG voting).
3.	**Appropriation Bill:** ⊙ Introduced to authorize govt. spending from Consolidated Fund of India. ⊙ It is introduced just after the general discussion on the budget proposals and voting on demands for grants have been completed.
4.	**Cut Motions:** ⊙ **Reduction motions** in DG form.
5.	**Finance Bill:** ⊙ it is the bill related to the imposition, abolition, alteration or regulation of taxes proposed in the budget. ⊙ After the general discussion on the budget proposals and voting on demands for grants have been completed. ⊙ Must be passed in 75 days.

6.	**Guillotine:**
	○ **Guillotine** on DG discussion with time limit.
7.	**Rajya Sabha:**
	○ **14 days** to return the Finance Bill with or without recommendations.
8.	**Changes Since 2017-18:**
	○ Budget introduction date moved to 1st February.
	○ **Railway Budget merged** with the General Budget.

3. Source of Revenue

```
                          ┌──────────────────────┐
                          │    Govt. Receipts    │
                          └──────────┬───────────┘
             ┌───────────────────────┴───────────────────────┐
   ┌──────────────────┐                          ┌──────────────────┐
   │ Revenue Receipts │                          │ Capital Receipts │
   └────────┬─────────┘                          └────────┬─────────┘
      ┌─────┴──────┐                              ┌────────┴─────────┐
┌──────────────┐ ┌──────────────┐    ┌──────────────────┐ ┌──────────────┐
│Revenue       │ │Non Tax       │    │Non Debt. Receipts│ │Debt Receipts │
│Receipts      │ │Receipts      │    └──────────────────┘ └──────────────┘
└──────────────┘ └──────────────┘
```

Revenue Receipts
- ❖ Corporation Tax
- ❖ Income Tax
- ❖ Customs Duties
- ❖ Excise Duties
- ❖ GST
- ❖ Tax on UT

Non Tax Receipts
- ❖ Interest
- ❖ Profits from PSU
- ❖ Surplus from RBI
- ❖ Other non tax Receipts
- ❖ Receipts of UT

Non Debt. Receipts
- ❖ Recovery of Loan
- ❖ Dis-Investment

Debt Receipts
- ❖ Market Loans
- ❖ Short term borrowings
- ❖ External Debt.
- ❖ State PF
- ❖ Other Receipts

Schools, hospitals, transport, railways, other economic activity generate income.

3.1 Capital Receipts

- ❖ Either decrease assets or Increase in liabilities

3.2 Revenue Receipts

❖ Neither decrease assets Nor Increase in liabilities
❖ **Two sources:**
1. **Tax Revenue**
2. **Non-Tax Revenue**

3.3 Revenue Expenditure

❖ **Neither** decrease liabilities Nor Increase in assets
❖ **Required for:**
1. Normal functioning of govt.
2. Interest payments (on debt)
3. Payment of grants to states, UTs, etc.

3.4 Capital Expenditure

❖ Expenditure leading to:
Either decrease liabilities or Increase in assets

4. Public Debt. Management (Debt Means Loans)

- ❖ **Types of Govt. Debts:**
  - ❍ **Internal Debt** (Domestic debt)
  - ❍ **External Debt** (Debt taken from the sources outside the country)
- ❖ **Public Debt Management** is crucial for **macroeconomic stability.**
- ❖ **3 Pillars of Debt Management:**
  - ❍ **Low cost of borrowing**
  - ❍ **Risk Mitigation**
  - ❍ **Market Development**
- ❖ **Domestic Debt:**
  - ❍ Managed by **IDMD (Internal Debt Management Dept.)** of **RBI.**
  - ❍ **Includes:**
    - ➤ **Treasury Bills** (Short-term govt. cash requirements)
    - ➤ **Dated Securities** (Long-term resources to finance fiscal deficit)
    - ➤ **Ways and Means Advance (WMA)** (Short-term credit to govt. up to 3 months)
- ❖ **External Debt:**
  - ❍ Managed by **Dept. of Economic Affairs** in **Ministry of Finance.**

○	Loans from institutions like **Asian Development Bank** or international banks.
○	**Long-term & fixed interest rate;** risk from depreciation of domestic currency.

❖ **Retail Participation:**

○	**RBI Retail Direct Facility** (launched Feb 2021) to increase retail participation in **G-Sec** via online access.

5. G-Sec. Means Govt. Securities

5.1 Key Terms & Concepts

❖ **Outcome Budget:** A progress report on how ministries and departments used funds from the previous budget.

❖ **Consolidated Fund of India:** Govt. can only spend from this fund if **appropriated by Parliament.**

❖ **Contingency Fund of India:** Enables govt. to meet unforeseen expenses without prior legislative approval (unlike the Consolidated Fund).

❖ **Public Account:** Fund flows where the government acts as a banker (e.g., Provident Funds, Small Savings) under **Article 266(1)** of the Constitution.

5.2 Deficits

1.	**Deficit = Expenditure - Income**
2.	**Revenue Deficit = Revenue Expenditure - Revenue Income**
3.	**Fiscal Deficit = Total Expenditure - Total Receipts** (excluding borrowings)

	○ Also: **Fiscal Deficit = Revenue Expenditure + Capital Expenditure - [Revenue Receipts + Capital Receipts]** (excluding borrowings)
	○ = revenue deficit + capital expenditure - non debt capital receipts
	○ Indicates the **government's borrowing requirement,** shown as a % of GDP.
4.	**Primary Deficit = Fiscal Deficit - Net interest liabilities**
	○ Interest payments represent **Debt Service payments**

FISCAL POLICY

1. Objectives

❖ Full employment
❖ Price stability
❖ Economic development
❖ Equitable income and wealth distribution
❖ Affects **aggregate demand** to stabilize the economy.

Note: The importance as well as order of priority of these objectives may vary from country to country and from time to time.
 	
❖ For instance-
 	
    ◯ Stability and equality - Priorities of developed nations,
 	
    ◯ Economic growth, Employment and Equity - Priority in developing countries

2. Types = (Expansionary Fiscal Policy & Contractional Fiscal Policy)

1.	**Expansionary Fiscal Policy**
	◯ **Objective:** Increase **Aggregate Demand (AD)**

	○	Stimulates the economy during a **recession** or **contractionary phase** of the business cycle.
	○	**Measures:**
		➤ **Tax cuts**
		➤ **Increase in govt. expenditure**
	○	**Impact:**
	○	Can lead to a **budget deficit** due to reduced income from taxes.
2.	**Contractionary Fiscal Policy**	
	○	**Objective:** Reduce **Aggregate Demand (AD)**
	○	Applied during **inflationary phases** or when an expansion could trigger inflation.
	○	**Implemented when:**
		➤ High economic growth
		➤ Inflation
		➤ Asset bubbles
	○	**Measures:**
		➤ **Decrease in govt. spending**
		➤ **Increase in taxes**
	○	**Impact:**
		➤ Controls inflation by reducing AD

3. Four Instruments of Fiscal Policy

3.1 Government Expenditure

❖ Includes **revenue expenditure** (e.g., salaries, subsidies) and **capital expenditure** (e.g., infrastructure projects).

3.2 Taxes

❖ Main **revenue source** for the government.

❖ During **recession**: Reduce income and corporate taxes to boost disposable income.

❖ During **post-recession**: Increase taxes to reduce disposable income.

3.3 Public Debt

❖ **Internal Debt:** Borrowed from domestic sources.

❖ **External Debt:** Borrowed from foreign sources.

❖ **Debt Types:**

○ **Market Loans** (Treasury bills, government loans)

○ **Small Savings** (non-negotiable, not traded)

❖ **Impact:** Borrowing can reduce AD; debt repayment can boost AD by increasing money circulation.

3.4 Budget

❖ **Balanced Budget:** No net effect on AD

❖ **Surplus Budget:** May reduce AD

❖ **Deficit Budget:** Can increase AD by injecting funds into the economy.

3.5 Fiscal Policy for Long Run

❖ Important for sustainable development

3.6 Incentive Effect of Fiscal Policy

Incentive Effect of Fiscal Policy	Impact
Infrastructure Spending	Boosts supply-side growth, supports private sector.
Public Goods	Enhances human & physical capital (e.g., healthcare, education).
Tax Impact	Encourages or discourages savings & investment.
Well-Designed Tax Policies	Rewards innovation, promotes private investment.
Market Failure Correction	Taxes curb negative externalities, subsidies boost output.

3.7 Fiscal Policy for Reduction in Inequalities of Income and Wealth

❖ **Progressive Direct Tax System:**

○ Higher taxes for the rich, fair tax burden distribution.

- ❖ **Differential Indirect Tax System:**
  - ◗ Tax luxury goods more, necessities less.
- ❖ **Planned Expenditure:**
  - ◗ Redirects income from the wealthy to the poor through **targeted spending programs.**
  - ◗ **Example: Poverty alleviation programs.**

3.8 Challenges

- ❖ **Progressive Tax** → Shouldn't discourage work, savings, and investment.
- ❖ **Redistribution Policy** → Shouldn't reduce incentives to work and save.

4. Limitations of Fiscal Policy

4.1 Types of Lags in Fiscal Policies

Type of Policy Lag	Description
Recognition Lag	Delay in identifying the need for policy change due to complex data
Decision Lag	Time taken to evaluate and choose the right policy.
Implementation Lag	Bureaucratic delays in enacting policies.
Impact Lag	Time before policy effects become visible.

4.2 Limitations

❖ **Bad Timing** → Poorly timed policy changes can be ineffective.
❖ **Policy Inflexibility** → Instant changes are not possible.
❖ **Rigid Expenditure** → Defense & capital projects are hard to alter.
❖ **Disincentives** → Some measures may discourage work & investment.
❖ **Inflation Risk** → Deficit financing increases purchasing power, causing inflation.
❖ **Govt. Borrowing Burden** → Increases future debt obligations.

5. Crowding Out (Here Fiscal Policy Becomes Ineffective)

Aspect	Explanation
Fiscal Policy Effects	Govt. spending may replace private spending, reducing impact on AD.
Ineffective Fiscal Policy	Deficit spending → borrowing → higher interest rates → crowding out private investors.
Growth Implication	Lower private sector investment weakens long-term economic growth.
Exception	In deep recessions, private investment is already low, so govt. borrowing may not raise interest rates.

MONEY MARKET

- **Unit 1: The Concept of Money Demand: Important Theories**
- **Unit 2: The Concept of Money Supply**
- **Unit 3: Monetary Policy**

❖ **Money can be anything that can serve as:**

1. Store of value $\rightarrow$ save now, use later

2. Unit of account $\rightarrow$ money provides common base for prices

3. Medium of exchange $\rightarrow$ money can be used to buy-sell goods & services from one another

❖ **Fiat Money:**

1. Fiat money is materially worthless but has value simply because a nation collectively agrees to ascribe a value to it.

2. Fiat money is also known as token money.

❖ **Characteristics of Money:**

1. Generally acceptable

2. Durable or long lasting

3. Effortlessly recognizable

4. Difficult to counterfeit i.ee not easily reproducible be people

5. Relatively scarce, but has elasticity of supply

6. Portable or easily transported

| 7. Possessing uniformity |
| 8. Divisible into smaller parts in usable quantities or fractions without loosing value |

| ❖ **Demand of Money = demand for holding cash** |
| 1. It refers to the desire of people to hold/keep money. |
| 2. Demand for money is derived demand, it is demanded for its purchasing power. |
| 3. Demand for money has an important role in determination of interest, prices, & income in the economy. |
| 4. Money demand is inversely related with interest rate. |
| 5. Price level is directly proportional to money demand. |
| 6. Income is directly proportional to money demand. |
| 7. Innovation indirectly proportional to money demand. |

Theories of Demand for Money

| Classical Approach: Quantity Theory of Money | Cambridge Approach | Keynesian Theory of Demand for Money | Inventory Approach to Transaction Balances | Friedman's Restatement of Quantity Theory | Demand for Money as Behaviour Toward Risk |
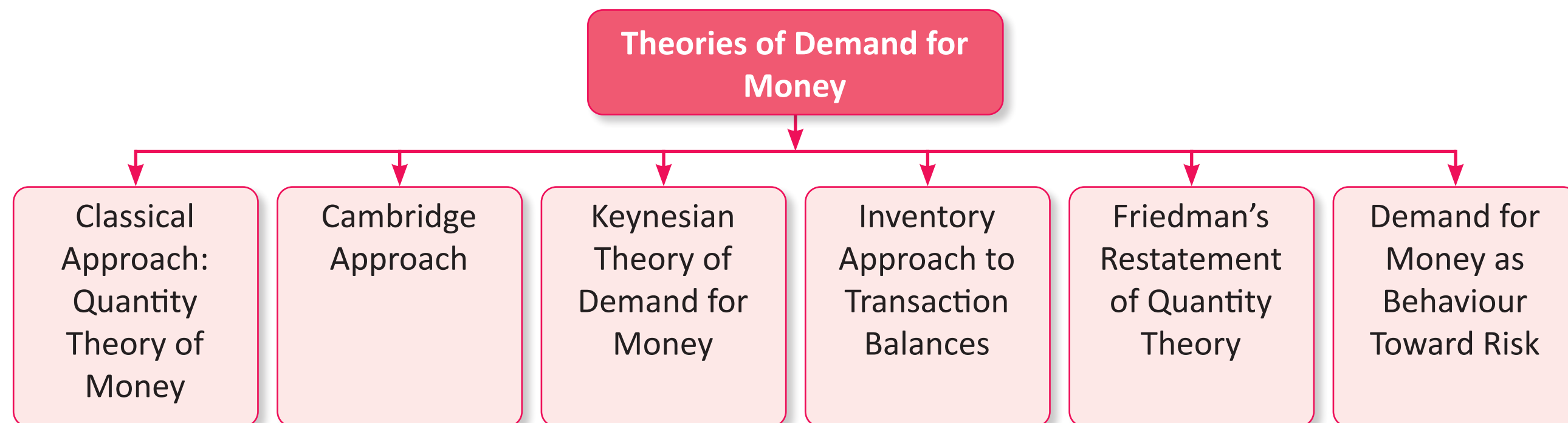
1. Classical Approach: Quantity Theory – Money (QTM)

1.1 Introduction

> ❖ **Theorist**- Irving Fisher
>
> ❖ **Book**- The Purchasing Power of Money, Published- 1911

1.2 Key Ideas

> ❖ Money is **demanded** for tr**ansaction purposes irrespective of interest rate**.
>
> ❖ **Equation: MV = PT** (Means Supply of money = Demand of money)
>
> ❖ Extended Equation (when credit money is included): **MV + M'V' = PT**

2. The Cambridge Approach

2.1 Introduction

> ❖ **Theorist**- Alfred Marshall, Pigou, Robertson & Keynes (Cambridge economists)
>
> ❖ Also known as the **Cash Balance Approach or Neo-Classical Theory**

2.2 Key Ideas

> ❖ Money increases utility in **two ways**:
>
> ○ Enables splitting of sale & purchase into two different times (transaction motive).
>
> ○ a hedge against uncertainty.

| |
|---|
| ❖ **Demand for money** depends on: |
| ○ **Income** (higher income leads to more purchases and need for money). |
| ○ **Other factors** like wealth and interest rate. |
| ○ Money serves as a "temporary abode" of value to overcome transaction costs. |
| ❖ **Equation: Md = kPY, k is known as cambridge k.** |

3. Keynesian Theory of Demand for Money/Liquidity Preference Theory

3.1 Introduction

❖ **Theorist:** John Maynard Keynes
❖ **Book:** General Theory of Employment, Interest, and Money (1936)

3.2 Three Motives to Hold Money

Transaction motive (buying-selling)	Precautionary motive (urgency)	Speculation motive (investment)
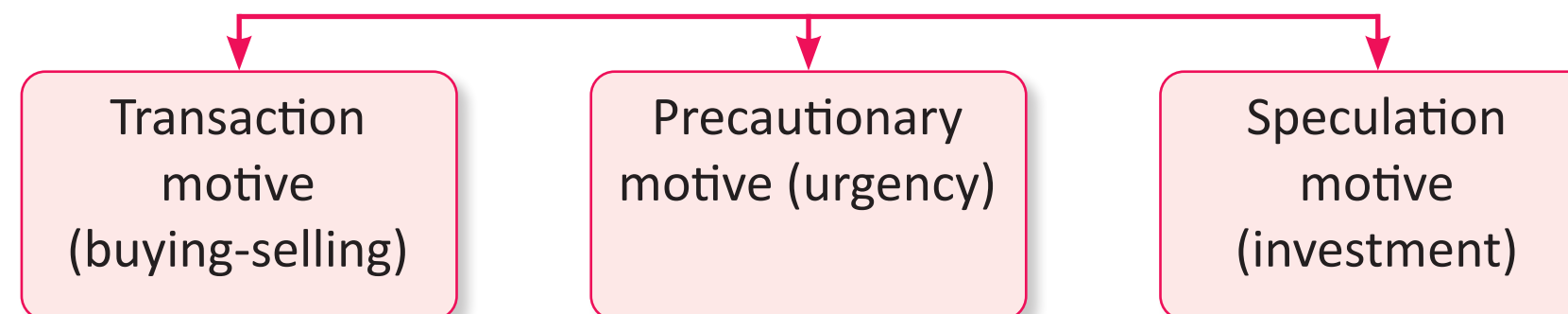
1. **Transaction Motive:**

   ○ Need cash for day-to-day transactions (personal/business exchanges).

   ○ Function of national income but not affected by interest rate

   ○ **Equation: Lr = kY**

2. **Precautionary Motive:**

   ○ Money held for unexpected expenses and uncertainties.

   ○ Depends on:

   (i) Size of income

   (ii) Economic/political conditions

   (iii) Personal characterisitics (optimistic/pessimistic).

3. **Speculative Motive:**

   ○ Desire to hold money to take advantage of attractive investment opportunities.

   ○ Inverse relationship between interest rates and speculative demand:

   ➤ Higher interest rates → lower speculative demand for money, and vice versa.

Returns on bonds are of two types, namely:
1. **Interest payment and**
2. **Expected rate of capital gain.**

3.3

If Current Rates > Critical/Normal Rates ($R_n > R_c$)
❖ Expect fall in interest rates → rise in bond prices.
❖ Convert cash to bonds.
If Current Rates < Critical Rates ($R_n < R_c$)
❖ Expect rise in interest rates → hold cash instead of bonds.

3.4 Liquidity Trap

The interest rate is very low it cannot go further lower
❖ Public holds cash instead of bonds, unaffected by interest rates (e.g., war, deflation).
❖ Investors choose cash over bonds, fearing losses.
❖ Speculative demand curve becomes perfectly elastic parallel to X-axis.
❖ Monetary policy ineffective/powerless—cannot stimulate growth.

Speculative Demand for Money

Post Keynesian Theories - Demand for Money

Inventory Approach

Friedman Theory

Demand for Money- Behaviour Towards Risk
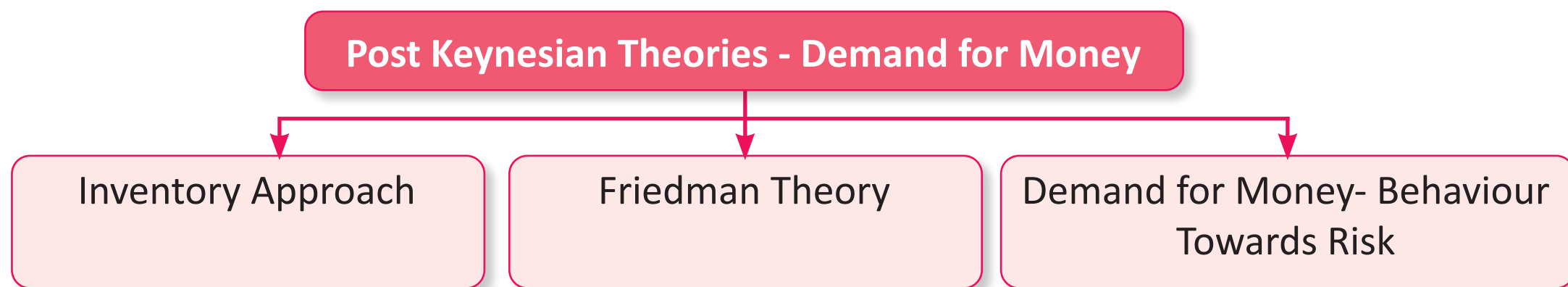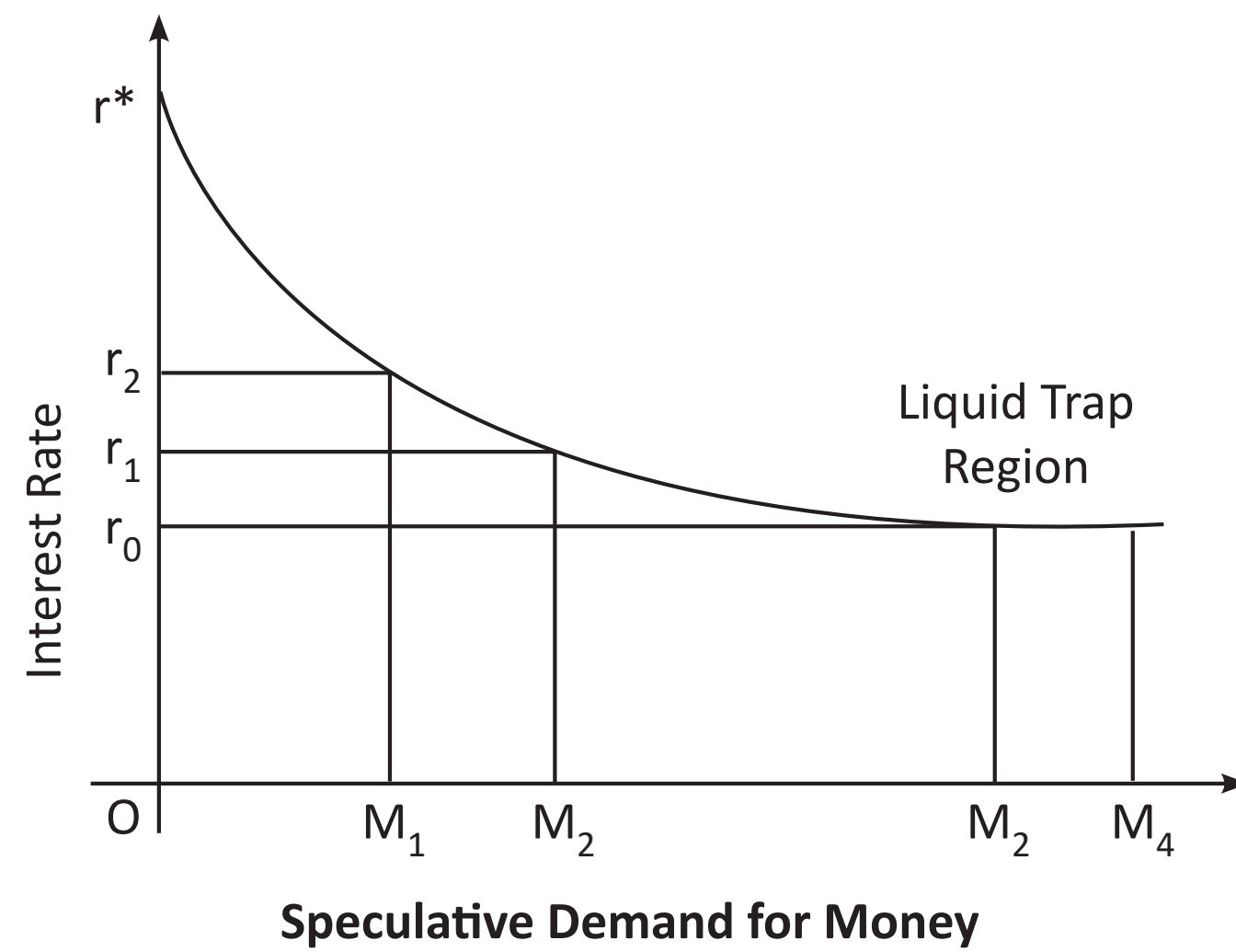
4. Inventory Approach to Transaction Balance

4.1

❖ **By:** Baumol (1952) & Tobin (1956)

❖ **Also Known As:** Inventory Theoretic Approach money or **'real cash balance'** was viewed as **an inventory held for transaction purposes.**

4.2 Key Idea

❖ **Real cash balance = Inventory held for transactions.**

❖ Assumes 2 storage mediums:

  1. Money

  2. Interest-bearing financial assets

❖ **Transfer Flow:** Money Fixed Cost (eg. Brokers) Assets

❖ Liquid financial assets (e.g., bank deposits) offer returns, justifying transaction costs.

❖ Baumol's equation of average cash withdrawals (C): $C = \sqrt{\dfrac{2bY}{r}}$ (2b = Two times broker's fee, Y = Individual's income, and r=Interest rate)

5. Friedman's Restatement of Quantity Theory

5.1

❖ **By**: Milton Friedman (1956)

❖ **Key Idea**: Demand for money = Demand for capital assets

5.2 Factors Affecting Money Demand

❖ **Permanent income**

❖ **Relative returns on assets** (risk-incorporated)

5.3 Four Key Determinants

1. **Total wealth = permanent income divided by discount rate** (includes money, bonds, equity, physical & human capital)

2. **Positively related to price level**

3. **Inversely related to opportunity cost of holding money**

4. **Influenced by inflation**

6. Demand for Money as Behaviour Towards Risk

6.1

❖ **By:** James Tobin
❖ **Key Idea:** Individuals balance between safe & risky assets

6.2 Key Points

❖ **Risk Aversion:** People prefer less risk
❖ **Portfolio Diversification:** Mix of money, bonds, & shares
❖ **Tobin's Liquidity Preference Function:**
❖ **Higher bond interest** → More investment, less cash
❖ **Lower bond interest** → More money demand
❖ Downward sloping money demand curve
❖ Interest rate affects money demand elasticity

THE CONCEPT OF MONEY SUPPLY

1. Money Supply

1.1 Introduction

- ❖ **Definition:** Total money available with the public in an economy.
- ❖ **Public:** Excludes banks & govt. institutions
- ❖ **Banking System:** RBI + Banks
- ❖ **Exclusions:** Inter-bank deposits & govt. holdings not counted

2. Rationale of Money Supply

- ❖ **Monetary Analysis:** Helps track money growth trends
- ❖ **Policy Tool:** Central banks use it for economic stability
- ❖ **Price & GDP Control:** Helps regulate inflation & growth

3. Sources of Money Supply

3.1 Central Bank (CB)

- ❖ **Controls Money Supply** → Issues fiat money & high-powered money

- ❖ **Fiat Money** → Backed by reserves, value guaranteed by govt.
- ❖ **Gold & Forex Reserves** → Supports currency issuance (Minimum Reserve System)

3.2 Banking System

- ❖ **Commercial Banks** → Influence money supply via credit creation
- ❖ **Central Bank Digital Currencies (CBDCs)** → Digital form of money (e.g., Digital Rupee)
- ❖ **Cryptocurrency** → Not legal tender, faces regulatory uncertainty

4. Measurement of Money Supply

4.1

- ❖ **RBI compiles monetary statistics** since **July 1935** and introduced broader measures in **1967-68**.
- ❖ **April 1977:** Second Working Group (SWG) introduced **M1, M2, M3, and M4**.

4.2 Types of Money Supply Measures

- ❖ **M1 (Narrow Money)**
  - ○ **Currency** (Notes + Coins) with the public
  - ○ **Demand Deposits** (CASA) in banks
  - ○ **Other Deposits** with RBI
- ❖ **M2**
  - ○ **M1 + Savings Deposits** with **Post Office** Saving Banks

❖ **M3 (Broad Money)**
○ **M1 + Time Deposits** with Banking System
❖ **M4**
○ **M3 + Deposits** with **Post Office Savings Organization** (Excluding NSC)

5. Determinants of Money Supply

❖ **Two Alternative Theories:**
○ **Exogenous:** Controlled by **Central Bank** (RBI).
○ **Endogenous:** Influenced by **economic activities**.
❖ **Current Explanation:**
○ **Money Multiplier Approach** → Focuses on **money stock & supply**.
○ **Monetary Base (High Powered Money)** = **Currency in circulation + Bank reserves**.
❖ **Conclusion:**
○ **Money supply** is determined by **Central Bank, Commercial Banks, and Public behavior**.

6. Concept of Money Multiplier

6.1

❖ **High Powered Money:** Money created by **Central Bank**.
❖ **Bank Money Creation:** Banks create money through loan, increasing money supply.

- ❖ This increase in money supply is money multiplier

- ❖ **Formula: Money Multiplier (m) =** $\dfrac{\textbf{Money Supply (M)}}{\textbf{Monetary Base (MB)}}$

6.2 If the following Assumptions are Met

1. Banks hold no excess reserves:
2. No currency held by individuals/non-banks

- ❖ Then, Money Multiplier = $\dfrac{1}{\text{Required Reserve Ratio (R)}}$

7. Money Multiplier Approach – Supply of Money (By – Milton Friedman and Anna Schwartz)

Factors determining money supply

- ❖ Stock high powered money (H)
- ❖ Reserve ratio (Reserve/Deposit)
- ❖ Currency to deposit ratio (currency/deposit)

7.1 The Behavior of the Central Bank

- ❖ Controls high-powered money supply.
- ❖ Money supply proportional to monetary base.
- ❖ Behavior assumes constant public and bank actions.

7.2 Commercial Bank

- ❖ Reserve ratio and lending influence money supply.
- ❖ Smaller reserve ratio → higher money multiplier.
- ❖ Excess reserves (ER) determine money supply.
    - ○ Excess reserve → Excess reserve = Total reserve – Required reserve
- ❖ Interest rates impact reserve ratio and excess reserves.

7.3 The Behaviour of Public

- ❖ Currency reduces money multiplier when converting deposits to cash.
- ❖ Currency deposit ratio reflects banking habits and economic factors.
- ❖ Smaller currency deposit ratio → larger multiplier.
- ❖ Higher TD/DD ratio → more reserves, leading to larger monetary expansion.
- ❖ **Money Multiplier determined by:**
    - ○ Reserve ratio (r)
    - ○ Excess reserve ratio (e)
    - ○ Currency ratio (c)
- ❖ **Money supply (M) Formula**: $M = \dfrac{1+c}{r+e+c} \times H$

8. Monetary Policy and Money Supply

- ❖ Central bank stimulates the economy by injecting liquidity (e.g., open market purchases of govt. securities).

- ❖ Money supply change formula: $\Delta \text{ Money Supply} = \dfrac{1}{R} \times \Delta \text{ reserve}$

- ❖ Open market sales reduce money supply, opposite of purchases.

9. Government Expenditure Effects

- ❖ Government uses WMA/OD to cover cash balance shortages.

- ❖ RBI provides excess reserves to the govt., leading to an increase in money supply via multiplier.

10. Credit Multiplier

- ❖ Commercial banks create money by lending excess reserves.

- ❖ Credit multiplier formula: $\text{Credit Multiplier} = \dfrac{1}{\text{Required Reserve Ration}}$

Unit 3 — MONETARY POLICY

1. RBI & Monetary Policy

- ❖ Manages inflation & price stability via supply adjustments
- ❖ OMO: Buying & selling securities in the open market
- ❖ Affects short-term rates → Influences long-term rates
- ❖ Lower rates = Easy | Higher rates = Tight

2. Monetary Policy– Framework

- ❖ **Key Components**
  - ○ **Objectives**
  - ○ **Analytics**
 - ○ **Operating Procedures**

2.1 Objectives

- ❖ **RBI Act 1934**:
  - ○ Regulate note issuance & maintain reserves

- ○ Manage currency & credit system
- ❖ **Primary Goals (Developing Nations)**
  - ○ Ensure economic growth
  - ○ Provide credit to productive sectors
  - ○ Maintain moderate interest rates to boost investment
  - ○ Develop a strong market for govt. securities
- ❖ **Core Focus**: Balance **price stability** & **economic growth**

2.2 Transmission

- ❖ RBI's policy changes impact economy & inflation
- ❖ Stages of Transmission
  - ○ Policy changes → Interest rates
  - ○ Interest rates → Economic activity & inflation
- ❖ **Channels of Monetary Policy Transmission**
  - **(a) Savings & Investment Channel**
    - ○ **Lower interest rates** → More spending, less saving
    - ○ **Cheaper loans** → More borrowing & asset demand
    - ○ **Lower borrowing costs** → Higher business investment
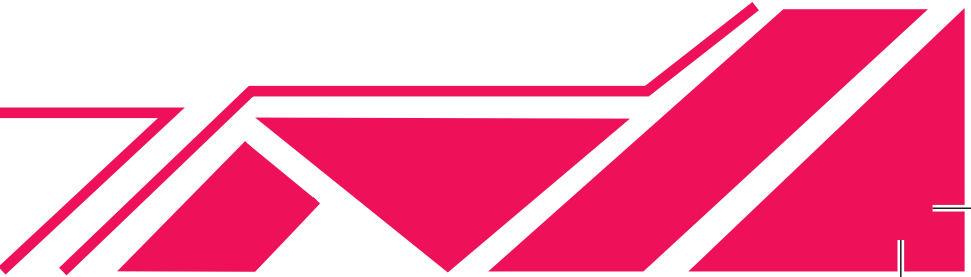
(b) Cash Flow Channel
○ **Lower rates** → Less interest payments, more disposable cash
○ **Lower rates** → Deposit income falls, restricts spending
○ **Overall** boost to economy
(c) Asset Price & Wealth Channel
○ **Lower rates** → Higher asset prices & future income
○ Higher asset prices **increase** equity, easing borrowing
○ **Increased wealth** → More investment & spending
(d) Exchange Rate Channel
○ **Lower cash rates** means India's interest rates < global rates
○ **Lower** returns on Indian assets
○ **Costlier imports** → Possible inflation spike

2.3 Operating Procedure and Instruments

(a) Quantitative Tools (affects money supply of overall economy)
1. Reserve Ratio
○ **CRR (Cash Reserve Ratio)**: % of cash banks must hold (No lending, No interest)
○ **SLR (Statutory Liquidity Ratio)**: % of liquid assets (Gold/Govt. Securities) → earns low interest

2. Open Market Operations (OMO)
○ **RBI Sells** = Liquidity $\downarrow$
○ **RBI Buys** = Liquidity $\uparrow$
(b) Qualitative Tools (affects money supply of a specific sector)
1. Margin Requirement $\rightarrow$ % gap between loan & collateral
2. Moral Suasion $\rightarrow$ RBI persuades banks to buy govt. Securities
3. Selective Credit Control $\rightarrow$ Limits loans to specific sectors
(c) Market Stabilization Scheme (MSS)
○ **Policy Rates**
1. Bank Rate/Discount rate $\rightarrow$ Banks borrow from RBI (Long-term) and bank pays repo rate to RBI as interest.
2. Liquidity Adjustment Facilities (LAF)
○ **Repo Rate/repurchase rate** $\rightarrow$ Banks borrow from RBI (Short-term) and bank pays repo rate to RBI as interest.
○ **Reverse Repo Rate** $\rightarrow$ it is the interest that bank earns by parking excess funds with RBI. Reverse repo rate = Repo rate – 1%
3. Marginal Standing Facility (MSF)
○ Banks get Emergency borrowing from RBI
○ **MSF rate = Repo +1%**

INTERNATIONAL TRADE

- **Unit 1: Theories of International Trade**
- **Unit 2: The Instruments of Trade Policy**
- **Unit 3: Trade Negotiations**
- **Unit 4: The Exchange Rate and its Economic Effects**
- **Unit 5: International Capital Movements**

1. Introduction

❖ International trade = exchange of goods and services & resources between countries.

1.1 Benefits of International Trade

❖ Stimulates economic efficiency, growth, and raises incomes

❖ Efficient Deployment of resources, decrease domestic monopolies,

❖ Access to new markets and materials, enables sourcing inputs & components

❖ Increased use of automation, technology, innovation, and investment

❖ Innovative services like banking, insurance, logistics, and consultancy services

❖ Improvement in the quality of output

❖ Opening new markets creates new production possibilities and export diversification

❖ Trade: Trade contributes to human resources development

❖ Strengthens bonds between nations, **promotes harmony** & **cooperation in nations.**

1.2 Disadvantages of International Trade

❖ **Inequality:** Unequal benefits among nations

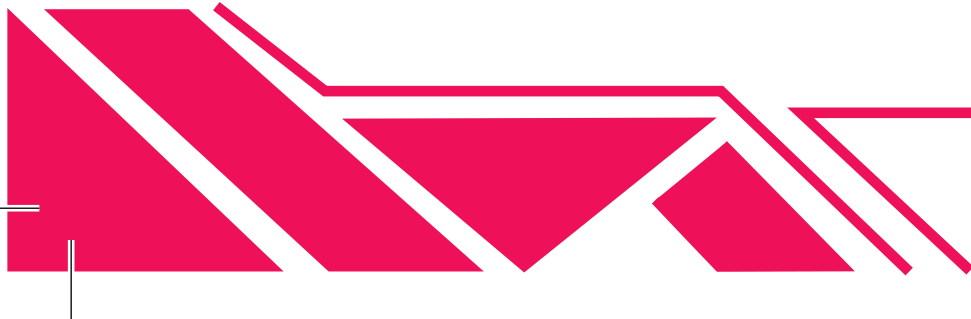❖ **Vulnerability:** Underprivileged countries may be exploited by powerful global corporations

❖ **Environment:** Environmental damage & resource loss
❖ **Global economic instability:** Economic crises & trade cycles spread globally
❖ Dependency on foreign nations causes loss of cultural identity, economic autonomy & political sovereignty
❖ **Priorities:** Overreliance on exports diverts investment priorities
❖ Lack of transparency and predictability, the risks associated with changes in governments' policies

2. Important Theories of International Trade

Topic: Theories of International Trade
1. The Mercantilists' View of International Trade
2. The Theory of Absolute Advantage
3. The Theory of Comparative Advantage
4. The Heckscher-Ohlin Theory of Trade
5. New Trade Theory-an Introduction

2.1 The Mercantilists' View of International Trade

❖ Mercantilism, originating from "mercantile," refers to the economic policy in Europe during the 16th-18th century.
❖ According to Microsoft Encarta Dictionary (2009), Mercantilism means government's power to control industry and trade
❖ **Higher exports than imports** is the motive

- ❖ Zero-sum game
- ❖ Unequal global distribution of **labor, raw materials, and capital** led to cross-border trade.
- ❖ A **favorable balance of trade** through aggressive exports and minimal imports is Still significant in modern economy.

2.2 The Theory of Absolute Advantage (Given by Adam Smith)

- ❖ International trade is mutually beneficial when countries specialize in producing commodities where they have an absolute advantage, allowing for efficient production and trade.
- ❖ **Assumption:**
  - ❍ **Labor is the only input, 2 countries, two commodities**
  - ❍ No transportation cost
  - ❍ **Mobility:** Labour mobile within countries, immobile between countries

2.3 The Theory of Comparitive Advantage (Given by by David Ricardo)

- ❖ Trade is based on **comparative** rather than **absolute** cost advantages.
- ❖ Countries **export** goods when they have a greater advantage and **import** goods when they have a lesser absolute advantage.
- ❖ Even if a country is more productive in all goods, **specialization benefits both**.
- ❖ **Douglas Irwin (2009) calls comparative advantage "good news" for economic development**

2.4 Heckscher Ohlin Theory of Trade (Given by Eli Heckscher & Bertil Ohlin)

❖ **Proposition:** Countries export goods based on factor endowments/availability

○ Capital rich countries → export capital-intensive products

○ labour rich countries → export labour-intensive products

❖ **Limitation**: Ignored **technology & product variety** in early models.

2.5 Comparison of Theory of Comparative Costs and Modern Theory

	Theory of Comparative Costs	Modern Theory
Basis	Differences in comparative costs	Differences in factor endowments
Theory	Labour theory of value	Based on money cost
Factors	Labour as the sole factor	Includes labour and capital; 2-factor model
Trade	International trade distinct from domestic trade	International trade is a special case of interregional trade
Focus	Studies comparative costs of goods	Considers relative prices of factors
Advantage	Differences in productive efficiency of workers	Differences in factor endowments
Prices	Ignores factor price differences	Considers factor price differences
Cause	Explain differences in comparative advantage	Explains differences based on factor endowments
Approach	Normative; shows gains from international trade	Positive; focuses on the basis of trade

2.6 Globalization and New International Trade Theory

❖ Developed in the **1980s**, introducing **imperfect competition** and **increasing returns**.

❖ **Positive-Sum Game** → Trade benefit countries mutually.

❖ **Key Gains** → Expands **markets**, increases **competition**, and enables **economies of scale**.

❖ **Paul A Samuelson:** The factor price equalization theorem

❖ **Paul Krugman's noticed** →Trade occurs between **countries having similar capital to labor ratio**.

❖ **Two key concept of new trade theory**

    1. **Economies of Scale** → **Lower costs** with higher production gives higher profit.

    2. **Network Effect (bandwagon effect)** → **More users (like what'sApp)** → **higher value** & better consumer choice.

1. Introduction

1.1 Basic Definitions

❖ **Trade Policy** are made by govt. to either promote or restrict trade, export or import
❖ **Free Trade:** Buyers and sellers from separate economies voluntarily **trade with minimum of state interference.**
❖ **Protectionism:** It is a state policy aimed to **protect domestic producers** against **foreign competition** through the **use of tariffs, quotas** and **non-tariff trade policy instruments.**
❖ **Trade liberalization:** It refers to opening up of domestic markets to rest of world by lowering trade barriers.

The Instruments of Trade Policy

Tariffs	Non-Tariff Measures (NTMs)	Export-Related Measures
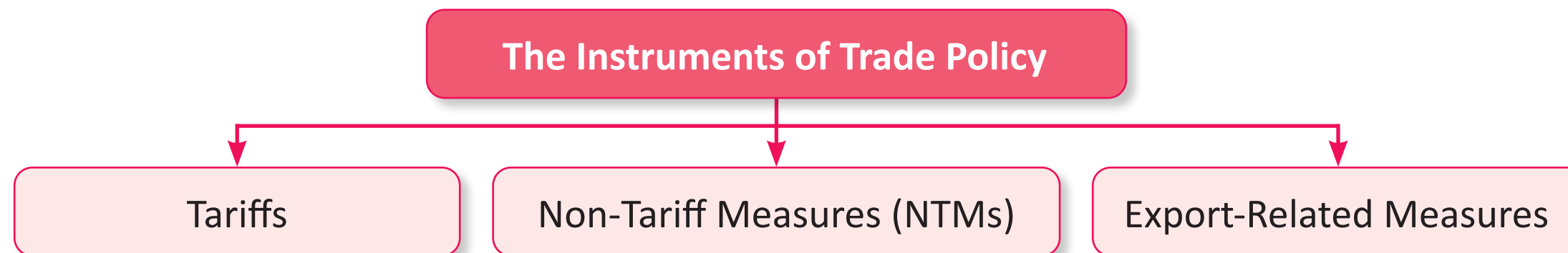
1.2 Tariff = Custom Duties

❖ Taxes on **imported/exported goods & services**

❖ **In this unit, tariff would refer to imported duties**

❖ **Tariff** raises **domestic price**, not world price

1.3 Types of Import Tariffs

❖ **Specific Tariff:** A fixed charge applied to each unit or weight of a product, such as 100 per kg.

❖ **Ad Valorem Tariff:** A tariff calculated as a percentage of the product's total value. i.e. A 30% ad valorem tariff on any American cycle.

❖ **Mixed Tariff:** A tariff imposed either Specific or Ad Valorem tariffs, whichever is higher

❖ **Compound Tariff:** calculated by adding up a specific duty to an ad valorem duty. compound tariff collects a revenue = $t_s q + t_a pq$.

❖ **Technical/Other Tariff:** This type of tariff is based on the specific content of the goods being imported, such as ₹2000 per solar panel or ₹100 per battery.

❖ **Preferential Tariff:** Lower tariffs applied under trade agreements, such as the reduced rates available within the EU or NAFTA agreements.

❖ **Generalized System of Preference (GSP):** A system that grants preferential tariff treatment to certain developing countries, offering trade benefits.

- ❖ **Tariff Rate Quotas (TRQ):** A combination of quotas and tariffs where:
  - ○ Imports within the set quota are charged lower or no tariff.
  - ○ Imports exceeding the quota face higher tariffs.
- ❖ **Most Favored Nation (MFN) Tariff:** The default tariff applied by WTO members to imports, unless there is a preferential agreement, like a Free Trade Agreement (FTA).
- ❖ **Variable Tariff:** A dynamic tariff system that adjusts import duties to align with domestic market support prices.
- ❖ **Applied Tariff:** The actual tariff imposed on imports under MFN, which may vary from the committed tariff but stays within agreed limits.
- ❖ **Escalated Tariff:** A higher tariff is imposed on processed or manufactured goods compared to raw materials, intended to protect domestic industries.
- ❖ **Prohibitive Tariff:** It is set so high that no imports can enter
- ❖ **Import Tariff:** The duty imposed on imports per unit or value, which may sometimes be escalated negatively.
- ❖ **Tariff Trade Distortions:** These arise from unfair trade practices, triggering actions like the "trigger-price" mechanism to counteract practices such as dumping and subsidies.
- ❖ **Bound Tariff:** The tariff rate that a WTO member has legally committed to not exceeding, providing transparency and predictability in trade relations.

❖ Anti-Dumping Duty
1. **Tariff** → Imposed on **imports sold below fair market value**.
2. **Purpose** → Prevent **unfair competition** & avoid **predatory pricing**.
❖ **Countervailing Duty (CVD)**
1. **Tariff** → Offsets **export subsidies given by exporting country** that lower prices artificially.
2. **Purpose** → Ensure **fair pricing**, support **domestic industries**.

1.4 Effects of Tariffs

❖ Acts as a trade barrier.
❖ Increases import costs, encouraging domestic consumption & production.
❖ Supports domestic industries by reducing foreign competition
❖ **Barrier** → Increases **import costs**, restricting trade.
❖ **Promotion** → Encourages **domestic consumption & production**.
❖ **Benefits** → Higher **prices & surplus gains** benefit domestic industries.
❖ **Employment** → Boosts **production & job creation**.
❖ **Distortion** → Hinders **comparative advantage & trade efficiency**.
❖ **Inefficiency** → Leads to **market inefficiencies**.
❖ **Revenue** → **Increases government income** through tariffs.

2. Non-Tariff Measures (NTMs) Divided into Technical and Non-technical Measures

2.1 Technical Measures

○ **Focus** → Product-specific properties (quality, safety, environment, plant/animal health).

(a) Sanitary & Phytosanitary Measures (SPS)

○ Protect **humans, animals, plants** from risks (additives, pests, toxins).

○ **Actions** → Import bans, hygiene regulations, safety standards.

(b) Technical Barriers to Trade (TBT)

○ Applies to **food & non-food products** (excluding SPS).

○ Covers **size, shape, labeling, design, performance** standards.

○ **Example** → Food laws, quality standards etc..

2.2 Non-Technical Measures

❖ **Relate to trade requirements** (e.g., shipping, investment).

❖ **Categories** →

○ **Hard Measures** → Price-based (e.g., tariffs).

○ **Threat Measures** → Anti-dumping duties.

○ **Other Measures** → Finance, investment restrictions.

(a) Import Quotas

- Definition → Limits quantity of imports within a given period (enforced via licenses).
- **Types:**
  - Binding Quota → Set below free trade level.
  - Non-Binding Quota → Above free trade level.
  - Absolute Quota → Fixed limit, imports allowed anytime.
  - Tariff Rate Quota → Price-based control affecting import prices.
  - Seasonal quotas
  - Temporary quotas

❖ **Effects:**

- Increases domestic prices. And no govt. revenue
- Creates "quota rents" (profits) for license holders.

(b) Price Control Measures

- **P**urpose → Regulate import prices to stabilize domestic markets.
- Known as → "Para-tariff" measures (fixed % or amount charges).
- Example → Minimum Import Price for surplus goods.

(c) Non-Automatic Licensing & Prohibition

- **Limits imports** regardless of origin.

- **Example**: India's **discretionary textile license** & prohibition on **primary animal products** under 60 EXIM codes.

(d) Financial Measures

- ❖ **Regulates import costs** by controlling access to foreign exchange.
- ❖ **Example**: Importers required to **prepay a % of goods' value** three months before arrival.

(e) Measures Affecting Competition

- **Provides special advantages** to select economic operators.
- **Example**:
  - ➢ Special import channels.
  - ➢ Mandatory use of national services.

(f) Government Procurement Policy

- **Favors domestic firms** in government purchases, even at higher prices.
- **Implemented via** mandates, tenders, and preferential treatment.

(g) Trade-Related Investment Measures (TRIMs)

- **Local content requirements**: Mandates a certain fraction of the final product be produced domestically.
- **Minimum local component use**: Restricts the use of imported components.
- **Limits on purchase/use of imported goods**.

(h) Distribution Restrictions
○ **Limits distribution channels** for imported goods.
○ **Requires licenses & certificates** for selling imported products.
(i) Restrictions on Post-Sale Services
○ **Limits foreign producers** from providing after-sales services.
○ **Services reserved for local firms** in the importing country.
(j) Administrative Procedures
○ **Cumbersome import processes** that increase cost & time.
○ **Discourages imports** through bureaucratic barriers.
(k) Safeguard Measures
○ **Temporary import restrictions** to protect domestic industries.
○ **Time-limited & non-discriminatory** as per WTO rules.
(l) Rule of Origin
○ **Determines product origin** for tariff & trade policies.
○ **Impacts duties, restrictions & trade agreements**.
○ **Certification challenges** arise for goods with components from multiple countries.
(m) Embargoes
○ **Total ban imposed by Government**
○ **Imposed due to political reasons** (e.g., sanctions) or health and religious issues.

2.3 Export-Related Trade Measures

(a) Export Bans

- **Restrictions on exports** to manage domestic supply shortages.

(b) Export Taxes

- **Increases price of exported goods** to reduce exports & boost domestic consumption.
- **Lowers domestic prices** by increasing supply.
- **Can be specific (fixed) or ad valorem (percentage-based).**

(c) Export Subsidies and Incentives

- Export subsidies, duty drawbacks, duty-free imports to boost domestic exports like grants, loans, equity infusions, and income/price support.

(d) Voluntary Export Restraints (VERs):

- **Informal Export Quota:** Self-imposed by exporting countries.
- **Imposed due to Political reasons**
- **Impact:** Higher domestic prices & domestic surplus.

1. Introduction

> ❖ Intense bilateral and multilateral trade negotiations have increased recently.
>
> ❖ India is part of 19 concluded agreements and negotiating over two dozen more.
>
> ❖ Major 2020 events highlight the importance of trade negotiations:

Brexit	USMCA replacing NAFTA	US-China replacing NAFTA	Global Pandemic
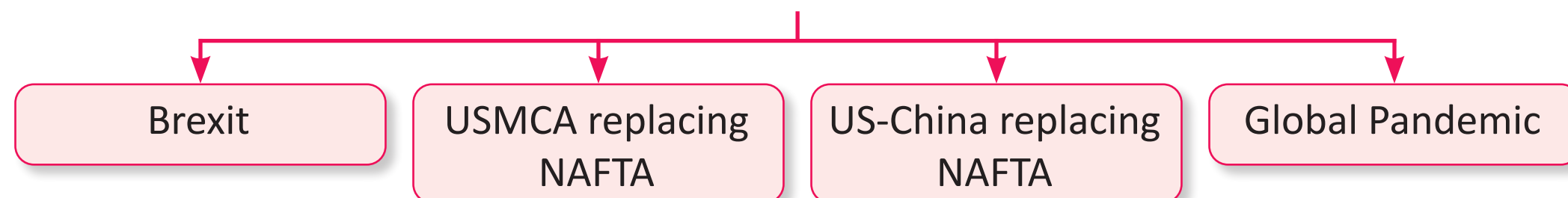
> ❖ Various interest group, NGO influence trade negotiation:
>
> ❖ Negotiating parties have diverse agendas:
>
>   ○ Market access through tariff reductions
>
>   ○ Protection for domestic industries
>
> ❖ Understanding regional and free trade agreements is crucial before discussing multilateral trade negotiations and institutions.

2. Taxonomy of Regional Trade Agreements (RTAs)

2.1

❖ Regional trade agreements are agreements among countries, regardless of their geographical proximity formed to reduce trade barriers among member nations.
❖ It's a treaty among 2 or more governments defining rules for trade for all signatory.
❖ Enforced on 1 feb 2021, 339 RTAs
❖ **GATT:** General agreements on tariff and trade
❖ **WTO:** World trade organization Both serve as platforms of trade negotiations and provide rules for governing global trade.

2.2 Types of RTA

Unilateral	❖ Importing country offers trade incentives to boost the exporting country's economy (e.g., Generalized System of Preferences)
Bilateral	❖ Agreements setting trade rules between two countries or blocs, possibly limiting certain goods or market entry barriers
Regional	❖ Preferential trade agreements reducing barriers reciprocally among group member
Trading bloc	❖ Group of countries with free trade agreements and common external tariffs
FTA	❖ Group eliminating tariffs and quotas among members while maintaining individual external tariffs

Customs Union	❖ Countries eliminating internal tariffs and imposing common external tariffs, possibly violating Most-Favored-Nation principle (e.g., Gulf Cooperation Council)
Common Market	❖ Deepens customs union with free flow of goods and production factors, and common external tariffs (e.g., EU, ASEAN)
Economic Union	❖ Member countries share a common currency & align macroeconomic policies, reduce need for forex operation

3. The General Agreement on Tariffs and Trade (GATT)

❖ GATT's working is responsible for 'goods council' which includes representatives from all WTO member countries.
❖ The council has 10 committees dealing with specific subjects like agriculture etc.
❖ Councils reporting to goods council-working party on state trading enterprise and Information Technology Agreement (ITA) committee.

3.1 Reasons for GATT's Decline

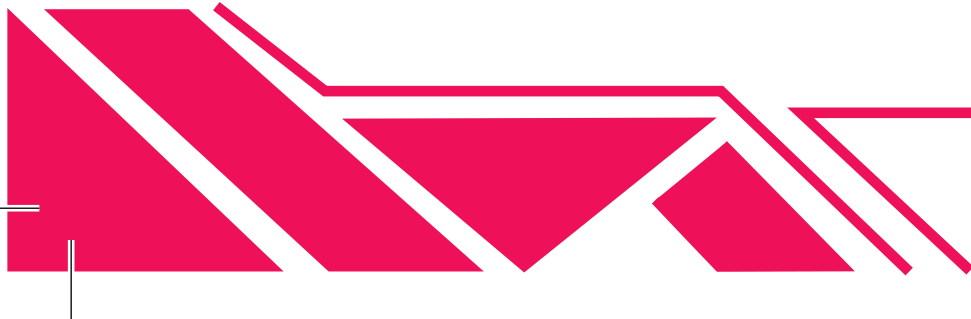| Reason	Explanation
Globalization	❖ Fast evolving contemporary complex world trade by emerging globalization
Investment	❖ Growth of international investment.
IPR and Services	❖ Intellectual property rights and trade in services not covered.
Merchandise Trade	❖ Increased world merchandise trade became beyond its scope.

System Ambiguities	❖ Ambiguities in the multilateral system could be heavily exploited.
Agricultural Trade	❖ Unsuccessful effort to liberalize agricultural trade.

4. The Uruguay Round and Establishment of WTO

Need	❖ Late 1980s saw need for more powerful and comprehensive international organization
Uruguay Round	❖ Started in September 1986, aimed at addressing various trade policy issues including tariffs and non-tariff barriers
Delays	❖ Faced delays & controversies, especially in agriculture
Duration	❖ Involved 123 countries, lasted seven years, concluding in December 1993
Agreem ents	❖ Agreements signed by most countries on April 15, 1994
WTO	❖ Establishment of World Trade Organization (WTO), incorporating the GATT

5. World Trade Organization (WTO)

❖ Sole global institutional organization regulating trade rules among nations, foundation if which have been negotiated & ratified by majority world trading countries.
Objectives of WTO
❖ Set and enforce rules for international trade
❖ Forum for monitoring & debate of trade liberalization
❖ Resolve trade disputes

❖ Increase transparency of decision making process
❖ Corporate with international economic institutions involved in global economic management
❖ Help developing countries benefit from global trading system
Preamble of WTO agreement includes
❖ Raising standards of living
❖ Full employment
❖ Sustainable growth of real income and effective demand
❖ Expansion of production of trade in goods + services
Measures
❖ Acts as forum for trade negotiation
❖ Reviewing national trade policies
❖ Administering trade agreements
❖ Technical assistance & training to developing nations
❖ Collaborations with other international orgs.

5.1 Structure of WTO

❖ Secretariat in Geneva, headed by a Director General.
❖ WTO Secretariats collaborate with 200 international orgs.

- ❖ **WTO members:**
  - ○ Out of 164, 117 being developing countries or separate customs territories
  - ○ 24 under negotiations
- ❖ WTO governs almost 95% of world trade
- ❖ 3 tier decision making system -
  - ○ **Ministerial conference:** convenes at least once every two years
  - ○ **General Council:** meets several times a year, also serves ad trade policy review body and dispute settlement body.
  - ○ **Councils for Goods, Services, and Intellectual Property:** Specialize councils oversee implementation of WTO agreements in specific areas.

5.2 The Guiding Principles of WTO Most Favoured Nation (MFN)

- ❖ WTO members must treat all the members equally without discrimination, i.e. any special treatment to a nation shall apply top all WTO members.
- ❖ First article of GATT, 2nd for GATS & 4th for TRIPS
- ❖ Exceptions being free trade agreements among specific groups, special access to developing countries and barriers against unfair trade practices.
- ❖ Limited disclination is allowed under strict conditions

5.3 National Treatment

- ❖ After entering the market, imported and locally-produced goods, foreign and domestic services, and intellectual property rights must be treated equally.
- ❖ Article 3 of GATT, 17TH for GATS and 3rd for TRIPS
- ❖ Custom duty on imports is not a violation.

5.4 Freer Trade (Through Negotiation)

- ❖ Lowering trade duties (tariff and non tariff) encourages trade.
- ❖ WTO discusses issues like red tape an exchange rates
- ❖ WTO allows to introduce changes gradually through progressive liberalization (developing countries given longer to fulfil obligations)

5.5 Predictability trough Binding & Transparency

- ❖ Promising not to raise trade barriers is crucial for providing businesses with stability and predictability, encouraging investment, job creation, and benefiting consumers with increased competition, choice, and lower prices.
- ❖ WTO binds countries entering open markets by setting celling on tariff rates (developed countries match ceiling and developing nations have rates)
- ❖ WTO promotes transparency at domestic and multinational level.

5.6 Encouraging Development & Economic Reforms

Support	❖ WTO supports developing nations with flexibility in implementing agreements
Participation	❖ Developing countries and transition economies played a more active role in Uruguay Round negotiations
Concession	❖ Developed countries allow duty-free and quota-free access for almost all product from least-developed country

5.7 WTO Agreements

❖ WTOs rule based system includes previsions about agreements on -
❖ **Agriculture:** It include binding & specific allegiance (by WTO members govt.) in 3 areas:
○ Market access
○ Domestic support
○ Export subsidies
❖ **Application of Sanitary & Phytosanitary (SPS):** Establishes frameworks to prevent unjustifiable discrimination or disguised trade barriers in sanitary and phytosanitary measures.
❖ **Textile & Clothing:** Replaced the Multi-fibre Arrangement, gradually integrating textile trade into GATT disciplines over a 10-year period.
❖ **Technical Barriers to Trade (TBT):** Prevent standards from becoming trade barrier by ensuring transparency and harmonization with international standards.
❖ **Trade Related Investment Measures:** Expands disciplines on investment measures, prohibiting inconsistent requirements on foreign investments.

- ❖ **Anti-dumping:** Tightens rules for calculating dumping margins to prevent abuse of anti-dumping measures.
- ❖ **Custom Valuation:** Establishes rules for consistent and reliable customs valuation to harmonize customs systems internationally.
- ❖ **Pre-Shipment Inspection (PSI) Agreement:** Ensures transparency in pre-shipment inspection procedures and provides dispute resolution mechanisms.
- ❖ **Rules of Origin:** Harmonizes rules for non-preferential commercial policy instruments and provides for dispute settlement procedures.
- ❖ **Import Licensing Procedure:** Simplify administrative procedures to prevent import licensing from acting as trade barriers.
- ❖ **Subsidies & Countervailing Measures:** Clarifies definitions of subsidies and procedures for adopting countervailing tariffs.
- ❖ **Safeguards:** Clarifies requirements and procedures for imposing safeguards in response to sudden import surges.
- ❖ **General Agreement on Trade in Services (GATS):** Provides obligations for trade in services, including most-favoured-nation treatment and transparency.
- ❖ **Trade Related Intellectual Property Rights (TRIPS):** Ensures intellectual property protection and enforcement, with dispute settlement procedures.
- ❖ **Trade Policy Review Mechanism (TPRM):** Conducts periodic reviews of members' trade policies and practices.
- ❖ **Plurilateral Trade:** Involves multiple countries with common interests but not all WTO members, negotiated separately from multilateral agreements.

6. The Doha Round

❖ **Doha Round (Doha Development Agenda):** Ninth round of trade negotiations launched at the WTO's Fourth Ministerial Conference in November 2001.
❖ **Aims:** Seeks major modifications of the international trading system by reducing trade barriers and revising trade rules.
❖ **Negotiations:** Cover 20 areas of trade, including agriculture, services trade, market access for nonagricultural products (NAMA), trade facilitation, environment, geographical indications, and certain intellectual property issues.
❖ **Controversial Topic:** Agriculture trade emerged as the most contentious issue in the Doha Agenda.

7. G20 Economies: Facilitating Trade

Restrictions	❖ Rising trend in export restrictions causing shortages, price volatility, and uncertainty
Resilience	❖ Supply chains remain resilient amid challenges like the Ukraine war, COVID-19, inflation, and monetary tightening, with varying industry impacts
Current	❖ As of mid-October 2022, WTO members had 52 export restrictions on food, feed, and fertilizers, and 27 COVID-19 essential products, mainly by G20 economies
Measures	❖ G20 economies introduced 66 trade-facilitating and 47 trade-restrictive measures unrelated to the pandemic, with import restrictions affecting 11.6% of G20 imports

Investigation	❖ Decline in trade remedy investigations, with anti-dumping measures being the most frequent
COVID-19	❖ Slowed implementation of new COVID-19-related trade measures, mostly trade-facilitating, with many phased out by mid-October 2022
G20	❖ G20 members include major economies like Argentina, Australia, Brazil, Canada, China, the EU, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the UK, and the US

1. The Exchange Rate

❖ A foreign currency transaction requiring settlement in a foreign currency, including:

1. Buying/selling goods or services in a foreign currency.

2. Borrowing/lending in a foreign currency.

3. Entering a forward exchange contract.

4. Acquiring/disposing of assets or settling liabilities in a foreign currency.

2. The Exchange Rate Regime

2.1

❖ 3 broad categories of exchange rate systems:

1. **Floating Exchange Rate** → Set by market forces without government intervention.

2. **Managed Floating (Soft Peg)** → Market-driven but influenced by government actions.

3. **Fixed Exchange Rate (Hard Peg)** → Government controls currency value via policy or intervention.

2.2 Exchange Rate Regime

❖ It is the system a country uses to manage its currency value against foreign currencies.

❖ **Major types:**

1. **Floating Exchange Rate** → Fully flexible.

2. **Fixed Exchange Rate** → Government-controlled.

2.3

❖ **Free Floating Exchange Rate:**

1. Self-regulating.

2. No government intervention is needed.

3. Unpredictable, leading to uncertainty in trade.

4. Buyers & sellers must account for exchange rate fluctuations.

❖ **Managed Floating Exchange Rate:**

○ Governments/central banks influence rates by buying or selling currency.

❖ **Fixed Exchange Rate:**

○ The government sets and maintains the exchange rate between currencies.

2.4 Advantages of Exchange Rate Regimes

❖ **Fixed Exchange Rate:**

1. Eliminates currency fluctuations, reducing exchange rate risk & transaction costs.

2. Boosts international trade & investment.

3. Reduces speculation on exchange rate movements.

4. Imposes monetary discipline, controlling inflation.

5. Enhances trade & investment through stability.

6. Strengthens monetary policy credibility.

7. Requires central bank intervention & foreign exchange reserves.

❖ **Floating Exchange Rate:**

1. Allows independent monetary policy.

2. Exchange rate can be adjusted for competitiveness.

3. No need for large foreign exchange reserves.

2.5 Disadvantage of Floating Exchange Rate

❖ Volatility creates uncertainty & increases risk premium in international transactions.

3. Nominal Versus Real Exchange Rates

3.1 Real Exchange Rate (RER)

❖ Measures the trade value of goods/services between countries.

❖ **Formula**: Real Exchange Rate = Nominal Exchange Rate $\times \dfrac{\text{Domestic Price Index}}{\text{Foreign Price Index}}$

3.2 Real Effective Exchange Rate (REER)

❖ This is the Nominal Effective Exchange Rate or NER (a measure of the value of a domestic currency against a weighted average of various foreign currencies) divided by a price deflator or index of costs.

❖ **Formula:** Real Effective Exchange Rate (REER)= $\dfrac{\text{Nominal Effective Exchange Rate}}{\text{Price Deflator}}$

4. The Foreign Exchange Market

❖ Commercial banks & brokerage houses set their own prices, influencing market rates.

❖ So, they are called **MARKET MAKERS**.

❖ **Types of Transactions:**

1. **Current Transactions (Spot Market):** Immediate currency exchange.

2. Future Transactions (Forward/Futures Market): Contracts for future currency exchange.
❖ **Vehicle Currency:**
❖ The U.S. dollar plays a dominant role in forex markets.

5. Determination of Nominal Exchange Rate

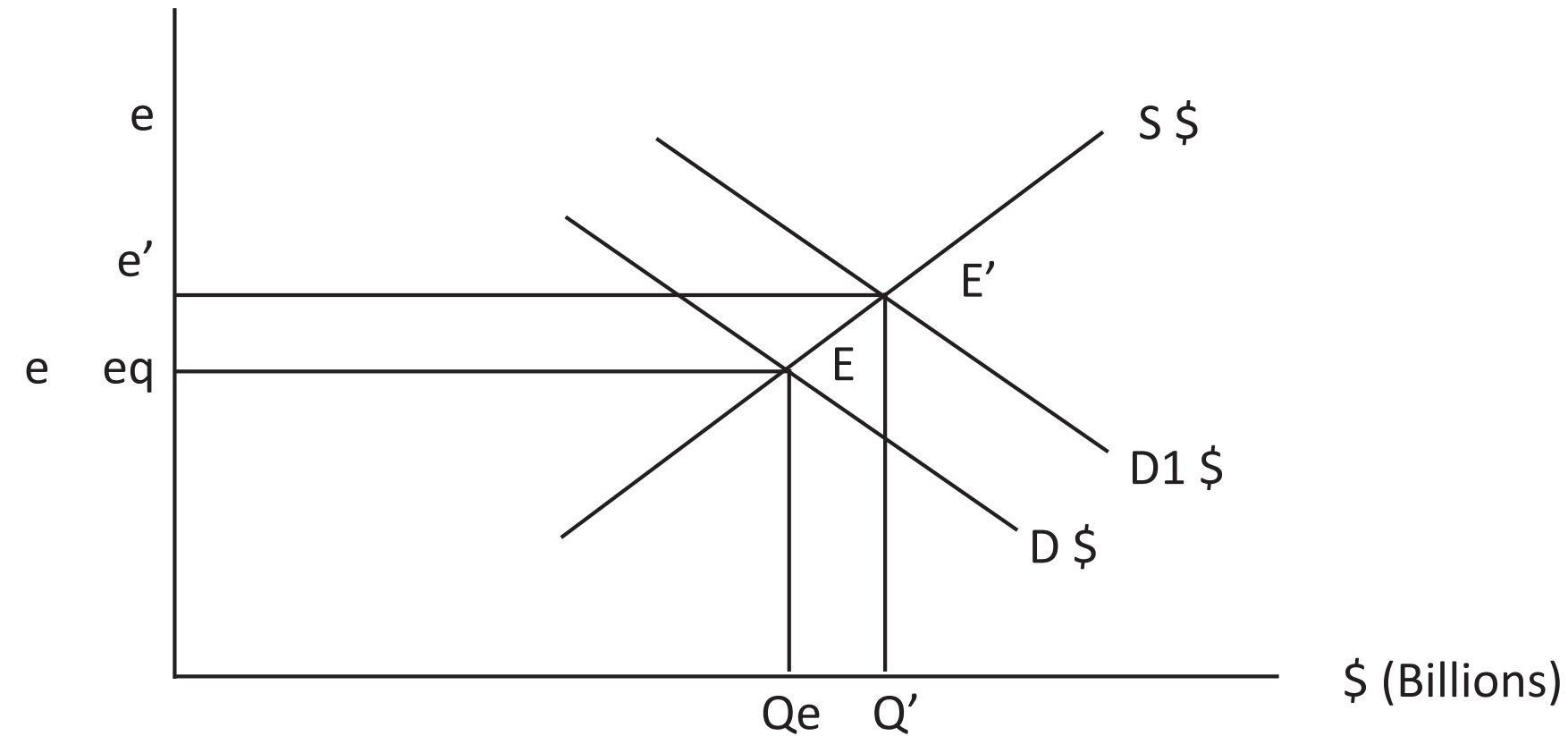**Determination of Nominal Exchange Rate**
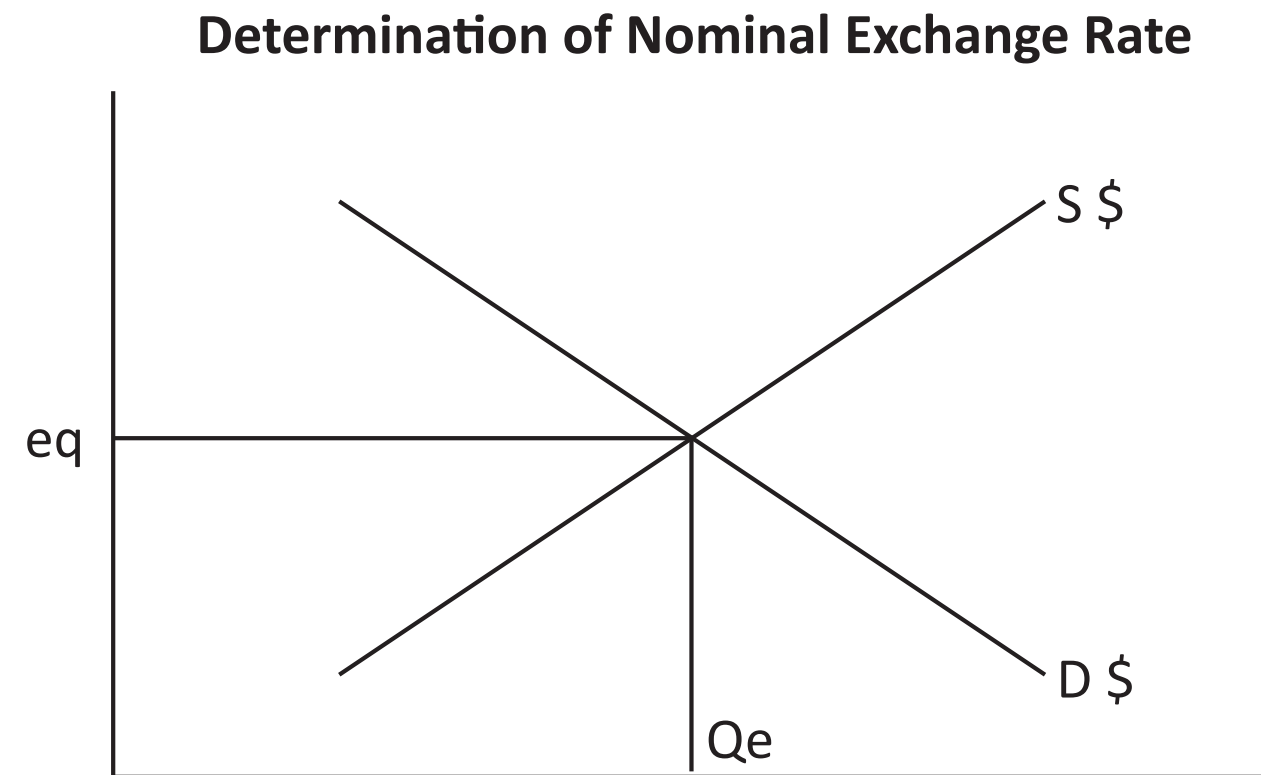
6. Changes In Exchange Rates

❖ **Appreciation:** Currency value **increases** relative to another currency or a currency basket.
❖ **Depreciation:** Currency value **decreases** relative to another currency or a currency basket.

Currency Depreciation under Floating Exchange Rates

7. Devaluation, Revaluation, Depreciation and Appreciation of domestic currency

Term	Definition	Cause	Exchange Rate System
Devaluation	Official reduction in currency value	Government policy	Fixed Exchange Rate
Depreciation	Market-driven fall in currency value	Demand & supply forces	Floating Exchange Rate
Revaluation	Official increase in currency value	Government policy	Fixed Exchange Rate
Appreciation	Market-driven rise in currency value	Demand & supply forces	Floating Exchange Rate

8. Impacts of Exchange Rate Fluctuations on Domestic Economy

Impact	Description
Trade Effects	Determines the extent and nature of trade by influencing export and import competitiveness.
Price Changes	Affects relative prices of domestic and foreign goods, shifting demand patterns.
Economic Activity	Depreciation makes foreign goods expensive, encouraging domestic consumption.
Export Gains	Economies with high exports benefit from currency depreciation.
Inflation	Depreciation raises import costs, increasing inflation.
Fiscal Health	Affects current account balance through export earnings and import costs.
Foreign Debt Burden	Depreciation increases repayment costs for companies and governments with foreign loans.
Financial Forecasting	Currency volatility makes planning and hedging more complex for businesses.
Investment Risks	Increases exchange rate risks for foreign investors and corporations.
Foreign Direct Investment (FDI)	High exchange rate volatility discourages foreign investors.

9. Consequences of Currency Appreciation on the Real Economy

1. **Reduced Exports:** Higher export prices lead to a decline in export quantity.
2. **Business Cycle Impact:** During a recession, appreciation worsens aggregate demand and unemployment.
3. **Lower Inflation:** Cheaper imports help reduce inflation.
4. **Reduced Competitiveness:** Domestic firms face challenges but may adopt cost-cutting innovations.
5. **Current Account Deficit:** Higher imports and lower exports worsen trade balance.
6. **Minimal Impact if Fundamentals Are Strong:** Appreciation due to a strong economy may not harm competitiveness.

5 Unit — INTERNATIONAL CAPITAL MOVEMENTS

1. Types of Foreign Capital

❖ **Foreign capital:** any inflow of capital into home country from abroad
❖ Hence requiring distinction between movement of capital and foreign investment

1.1 Importance

Grants	Bilateral/direct inter government grants
Multilateral	Aid from pooled govt funds with inter. organization (e.g., World Bank)
Tied Aid	Aid with strict mandates on usage untied aid without stipulations
Grants	Voluntary transfer of resources by governments, institutions, agencies, or organizations

| |
|---|
| ❖ **Forms of borrowings:** |
| ○ Direct inter government loans |
| ○ Loans from international institutions (e.g. world bank, IMF, ADB) |

○ Soft loans for e.g. from affiliates of World Bank such as IDA
○ External commercial borrowing
❖ **Forms of investment:**
○ Foreign Portfolio Investment (FPI) → eg bonds etc
○ Foreign Direct Investment (FDI) → eg. Industrial enterprise

2. Foreign Direct Investment (FDI)

Long-term interest and control of a resident entity in one economy by an enterprise from another economy	
Components	❖ Equity capital, reinvested earnings, intra-company loans
Forms	❖ Opening overseas companies, establishing subsidiaries, joint ventures
Nature	❖ Investments where the investor retains control over use and decision-making

❖ **Types:**
○ **Horizontal:** Establishing the same type of business operation in foreign country as in the home country.
○ **Vertical:** Establishing or acquiring a business activity in a foreign country that supplements the investor's main business activity.
○ **Conglomerate:** Making a foreign investment in a business unrelated to the investor's existing business in the home country.
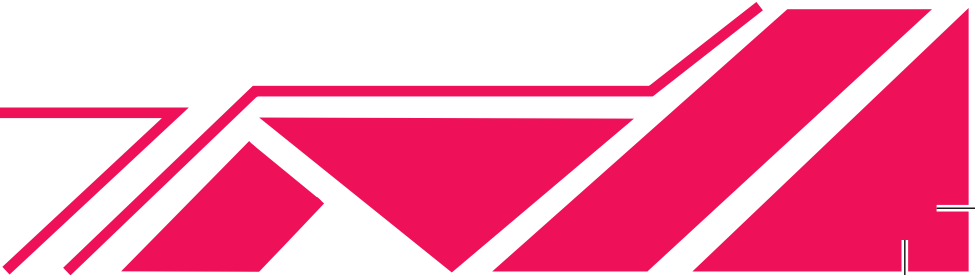
3. Foreign Portfolio Investment (FPI)

3.1

❖ It involves flow of financial capital rather than real capital & does not entail ownership or control by the investor.

3.2 Characteristics

Execution	❖ Through capital markets by individuals and institutions
Involves	❖ Does not involve manufacturing goods or providing services
Control	❖ Investors do not intend to exercise control over companies they invest in
Aim	❖ Primary aim is to earn return on investment, focusing on capital safety, appreciation potential, & generated return

❖ **Investment stake:** Portfolio investments typically involve a lower stake in companies, usually below 10%

❖ **Nature:**

   ○ Short term

   ○ Evaluation separately for each unit

   ○ Often speculative (can lead to crises if inverts confidence shakes)

❖ **Example:** Investing in stocks of foreign companies, foreign country bonds etc.

4. Reason for Foreign Direct Investment (FDI)

4.1

Profit	❖ Economic agents seek to maximize economic interests, exporting capital for profitable opportunities
Return	❖ Primary motive is achieving a higher rate of return compared to the home country
Assets	❖ Foreign firms invest due to firm-specific assets like superior management skills or important patents

❖ **Other Reasons:** Listing only a few below
- ○ Interdependence of Economies
- ○ Transnational Corporations
- ○ Economies of Scale
- ○ Licensing Feasibility
- ○ Direct Control
- ○ Avoiding Competition
- ○ Risk Diversification

4.2 Economic Determinants

Market-seeking FDI:
❖ Market size and per capita income
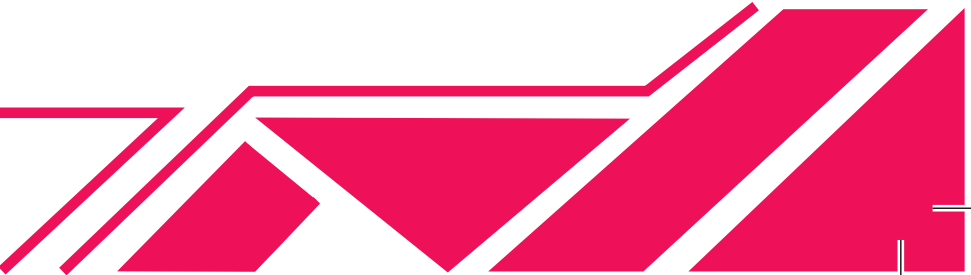
❖ Market growth
❖ Access to regional and global markets
❖ Country-specific consumer preferences
❖ Structure of markets
Policy Framework:
❖ Economic, political, and social stability
❖ Rules regarding entry and operations
❖ Standards of treatment of foreign affiliates
Resource or Asset Seeking:
❖ Raw materials
❖ Low -cost unskilled labour Availability of skilled labour
❖ Technological, innovation etc.
❖ Physical infrastructure
Efficiency Seeking:
❖ Cost of physical and human resources
❖ Other input costs
❖ Membership in regional integration agreements
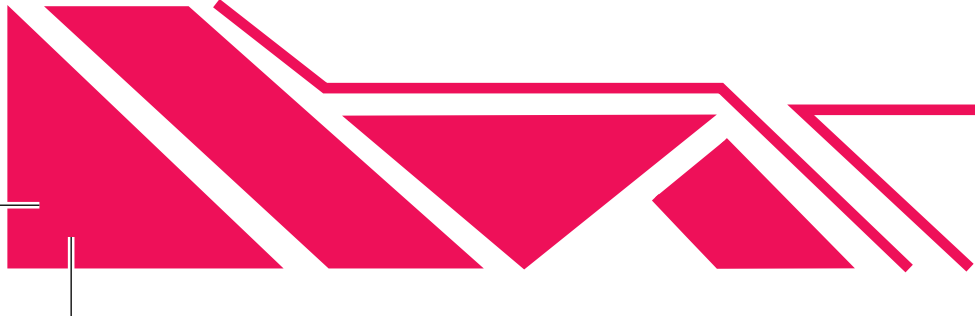
Business facilitation:
❖ Investment promotion and incentives
❖ Hassel cost
❖ Social amenities
❖ After investment services

5. Modes of Foreign Direct Investment (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
❖ Greenfield investment (establishing a new overseas affiliate to start production afresh)
❖ Brownfield investments (using existing infrastructure through merging, acquiring, or leasing)

5.1 Benefits of FDI

❖ Fosters competition	❖ Tax revenue
❖ Access to market s	❖ Promotes reforms
❖ Accelerates growth	❖ Favourable BOP
❖ Indirect employment	

5.2 Problems Associated with FDI

- ❖ **Dual Economy:** FDIs can create a dual economy with a developed foreign sector and an underdeveloped domestic sector.
- ❖ **Crowding-Out Effect:** FDIs may borrow from local markets, raising interest rates and reducing domestic investments.

6. FDI of India

- ❖ **Offshoring:** FDIs may shift jobs abroad, reducing employment potential in the home country.
- ❖ **Capital-Intensive Methods:** FDIs often use capital-intensive methods, which create few jobs, unsuitable for labor-abundant developing countries.
- ❖ **National Security:** Foreign firms may pose national security risks in host countries with existing hostilities.

Role	❖ Crucial for India's economic growth by providing non-debt financial resources
Privileges	❖ Investment privileges like tax breaks and lower salaries attract foreign corporations
Support	❖ Supportive policy framework, vibrant business climate, and rising global competitiveness attract FDI
Record High	❖ FDI inflows reached US$ 81,973 million in 2020-21, 10% increase over previous year
Key Sectors	❖ Major recipients include information technology, telecommunications, and automobile sectors in FY22
Ranking	❖ Ranked eighth among the world's major FDI recipients in 2020, up from ninth in 2019

7. Overseas Direct Investments Made by Indian Companies

- ❖ **Overview of Indian Economy:** India's economy is primarily driven by domestic demand, contributing 70% to economic activity, with robust policy measures aiding its recovery from the Covid-19 pandemic.

- ❖ **Investment Abroad:** Indian businesses are leveraging India's strong economic position to make investments abroad, expanding their operational footprint and contributing to mutual growth.

7.1 Recent Overseas Investments

| Investor	Amount	Subsidiary Invested in
Tata Steel	7 million pounds	Hartlepool Tube Mill, England
Tata Communication	US$ 690 million	Subsidiary in Singapore
Jindal Steel and Power	US$ 366 million	Subsidiary in Mauritius
Wipro	US$ 204.96 million	Subsidiary in Cyprus
Jindal Saw	US$ 64.5 million	Subsidiary in the UAE

7.2 Strategic Partnerships

Companies Partnering	Purpose of Partnership
ICICI Bank and Santander	Facilitate banking requirements for corporates in Britain
Reliance Brands and Maison Valentino	Open boutiques for Maison Valentino in India

Reliance Retail and Gap Inc.	Introduce the Gap brand to the Indian market
Tata Steel & BHP	Explore low-carbon iron and steelmaking technology through MoU

7.3 Innovative Ventures

Company	Venture
Ola Electric	❖ Ola Electric ❖ Ola Future Foundry, a global hub for engineering and vehicle design in the UK
Essar Group	❖ Partnered with Progressive Energy to invest in a hydrogen manufacturing plant in the UK
Hindalco's Subsidiary Novelis	❖ Partnered with Progressive Energy to invest in a hydrogen manufacturing plant in the UK

INDIAN ECONOMY
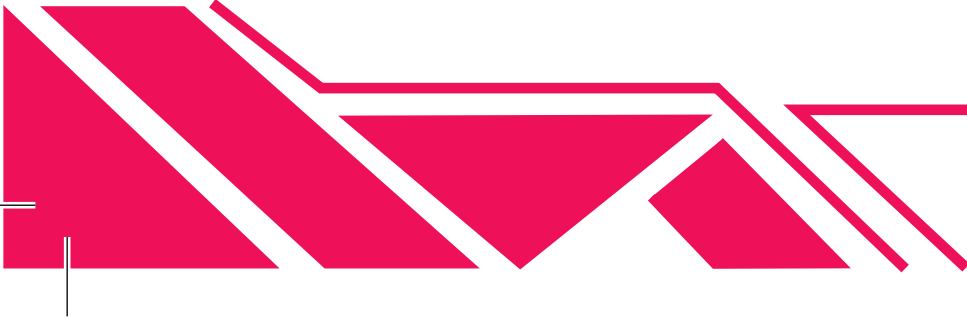
10 Chapter | INDIAN ECONOMY

1. Status of Indian Economy: Pre Independence Period (1850-1947)

1.1 Indian Economy: (1850-1947)

Largest Economy	Controlled 1/3rd to 1/4th portion of world wealth.
Agriculture	Main livelihood.
Artisans & Craftsmen	Produced global trade goods.
Agriculture & Craftsmanship	Supported local and global markets.

1.2 Ancient Economic Philosophy of India

❖ **Arthashastra** by **Kautilya (Chanakya)** (321-296 BCE).
7 Vital Elements of Policy
1. King
2. Ministers
3. Farmlands/Agriculture

4. Fortresses (e.g., Lal Qila)	
5. Treasury	
6. Military	
7. Allies/Friends	

1.3 Period of British Rule in India

❖ **East India Company Rule**: 1757 – 1858
❖ **British Government Rule**: 1858 – 1947

1.4 Economic and Social Consequences of Damage to Traditional Economy

Unemployment	Decline of industries, more dependence on agriculture.
Land Pressure	Fragmentation led to poverty & low productivity.
Imported Goods	British machine-made goods hurt local industries.
Zamindari System	Strengthened British rule, harmed the economy.
Excessive Rent	Zamindars exploited tenants.
Agricultural Collapse	Debt, absentee landlords, and neglect ruined farming.

1.5 Trade Policies of Britishers (Discriminatory Tariffs)

❖ **Indian Goods** → **High tariffs** → Costlier → Lower sales
❖ **British Imports** → **Low tariffs** → Cheaper → More demand
Effects:
❖ **Decline in Demand** → Indigenous products suffered
❖ **Rising Competition** → British machine-made goods dominated
❖ **Consumer Shift** → Preference for foreign goods

1.6 Stagnated Nature of Industrialization: During the Colonial Era

Aspect	Details
Cotton Mills (1930s)	5th globally (9 million spindles)
Jute Mills	Largest in raw jute consumption
Iron Industry (1930)	8th in world output
Industrial Ranking (1930)	12th in manufactured products value
Producer Goods Industries	Limited expansion due to British Policies
Manufacturing Sector Share (1946)	7% Net Domestic Product

2. Indian Economy: Post-independence (1947-1991)

2.1 Overall

Literacy Rate (1947)	18%
Life Expectancy (1951)	32 years
Nehruvian Model	State-led industrialization & economic redistribution
Planning Commission (1950)	Formed for economic planning
First 5-Year Plan (1951)	Launched for development
Development Strategy	Rapid industrialization & modernization

2.2 Industrial Policy Resolution (Industrial & Trade Policies)

Industrial Policy Resolution (1948)	Expanded public sector, state monopoly in key areas
State Monopoly Areas	Atomic energy, arms, railways
Basic Industries	State-held investment rights
Economic Philosophies (1950s)	Nehru (heavy industry) vs. Gandhi (small-scale industries)
Industrial Policy Resolution (1956)	Public sector-focused development framework
Trade Policy (1950s)	Open till 1958, then stricter controls
BoP Crisis (1958)	Led to tighter trade & investment policies
Growth Rate (1950-1980)	3.5% ('Hindu growth rate')

2.3 Key Events and Policies (Economic Policies)

Pre-Green Revolution	Land reforms, cooperatives; weak R&D
Green Revolution	High-yield seeds, fertilizers, pesticides
Bank Nationalization	14 banks (1969), 6 banks (1980)
Economic Performance (1965-81)	Low productivity, License Raj, external shocks
MRTP Act (1969)	Regulated large firms, restricted expansion

2.4 Small Scale Sector Reservation

Policy	Reserved products for small-scale industries
Goal	Labor-intensive growth & income redistribution
Issue	Big firms excluded & global competitiveness reduced
Challenge	Strict labor laws hindered growth

3. The Era of Reforms

3.1 Early Liberalization (1981-1989)

GDP Growth	5.7% (1980-85), 5.8% (1985-90)
Industrial Policy	Delicensing, MRTP limit increase
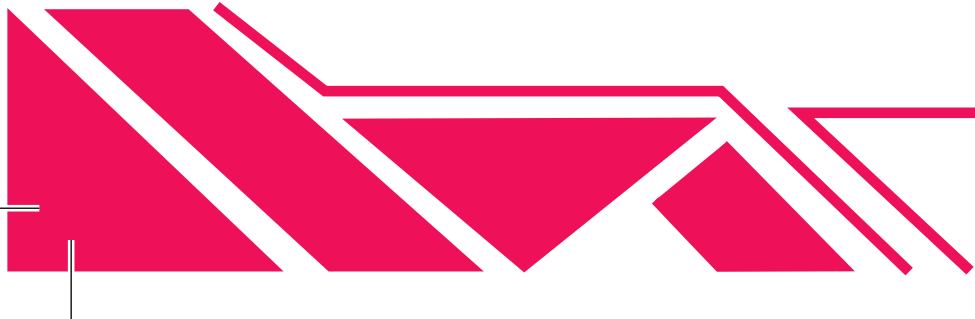
MODVAT	Reduced tax on inputs
SEBI	Established in 1988
OGL Expansion	1,329 capital goods items by 1990
Export Incentives	Introduced & expanded
Exchange Rate	Rupee depreciated ~30% (1985-90)
Price Controls	Abolished on cement & aluminum
1986 Budget	Tax cuts, import liberalization, reduced tariffs

4. The Economic Reforms of 1991

Causes for Reforms:
❖ Fiscal deficit, Balance of payments crisis, Low forex reserves
❖ Import restrictions, External borrowing, Political instability
Reform Objectives:
❖ Market-friendly economy, Macroeconomic stability
Policy Types:
❖ Stabilization (short-term)
❖ Structural reforms (long-term)

Key Areas of Reform:
❖ Liberalization, Privatization, Globalization

4.1 Fiscal Reforms

Reasons for Fiscal Reforms:
❖ Excess demand, surge in imports, widening current account deficit (CAD)
❖ Measures to increase revenues & curtail expenditure
❖ Stable, transparent tax structure
❖ Better tax compliance
❖ Curb government expenditure
❖ Reduce subsidies
❖ Disinvestment in select PSUs
❖ Encourage private sector participation

4.2 Monetary & Financial Sector Reforms

Focus Areas:
❖ Reduce NPAs, introduce competition, deregulate interest rates

Key Measures:
❖ Interest rate liberalization
❖ Opening private sector banks & promoting competition
❖ Reduction in SLR & CRR (Narasimham Committee 1991)
❖ Bank branch licensing liberalization
❖ Prudential norms for accurate financial reporting

4.3 Capital Market Reforms

SEBI:
❖ Set up in 1988, statutory recognition in 1992
❖ (Its role) Independent regulator ensuring transparency in the capital market & efficient resource allocation

4.4 The New Industrial & Trade Policies (Announced July 24, 1991)

| Objective: |
|---|
| ❖ Deregulate for a competitive industrial economy |
| **Key Reforms:** |
| 1. **Ending the 'License Raj':** Removed licenses for most industries (except 5: arms, atomic, narcotics, hazardous chemicals, alcohol/cigarettes) |

2. **Limiting Public Sector:** Public Sector limited to 2 sectors: Railway transport & Atomic energy
3. **MRTP Act Restructure:** Repealed provisions on mergers & takeovers; no pre-entry scrutiny
4. **Dereservation of Products:** Opened small-scale reserved products to large-scale industries
5. **Ending Public Sector Monopoly:** Only reserved sectors: Atomic energy & Railways
6. **Liberalizing Foreign Investment:** Automatic approval for most FDIs; prohibited in retail, atomic, lottery, and gambling sectors
7. **External Trade Liberalization:** Shifted to negative list approach for trade
8. **Tariff Reduction:** Tariffs cut from 355% (1990-91) to 10% (2007-08)
9. **Rupee Devaluation:** Devalued by 18% against the dollar
10. **PSUs Disinvestment & Autonomy:** Reduced government equity & increased PSU autonomy

5. NITI AAYOG: A Bold Step for Transforming India

Establishment Date	January 1, 2015
Objective	Foster innovation & promote cooperative federalism
Role	Think Tank & Policy Guidance
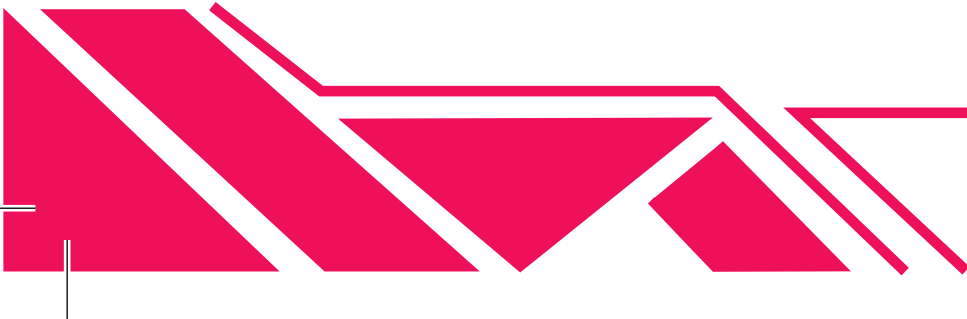
5.1 Key Initiatives

LIFE	Aims to replace the 'use-and-dispose' economy
NDAP (The National Data and Analytics Platform)	Improves access to Indian government data
Shoonya	Promotes electric vehicles
E-Amrit	One-stop platform for information
IPI (India Policy Insights)	Provides insights to shape India's policies
Methanol Economy	Reduces oil imports and emissions and convert waste into methanol
Transforming Gold Market	Stimulates growth and exports

5.2 Shortcomings

❖ Limited role and autonomy
❖ Excluded from budgeting
❖ Weakened counterbalance function against Ministry of Finance

6. The Current State of the Indian Economy: A Brief Overview

6.1 The Primary Sector

Importance:
❖ **Largest source of livelihood**; supports 47% of the population
❖ **Contributes 18.8%** to GDP
Achievements:
❖ **Top producer** of milk, pulses, jute, spices
❖ **Largest area** planted with wheat, rice, and cotton
Second largest producer of fruits, vegetables, tea, cotton, sugarcane
World's largest buffalo herd
Food grain production: 315.7 million tonnes (2021-22)
Private investment: 9.3% in 2020-21
Exports: 3.74 lakh crore in 2022-23
Government Measures:
1. **100% FDI in Food Marketing**: Allowed under the automatic route.
2. **PM KISAN**: Income support for farmers.

3. **Minimum Support Price (MSP)**: Fixed at 1.5 times the cost of production.

4. **Institutional Credit**: Concessional rates for agriculture.

5. **Launch of National Mission for Edible Oils**: Promoting domestic edible oil production.

6. **PMFBY (Pradhan Mantri Fasal Bima Yojana)**: Insurance scheme for crop loss/damage.

7. **MIDH (Mission for Integrated Development of Horticulture)**: Integrated Development of Horticulture.

8. **Soil Health Cards**: Provision for farmers to assess soil quality.

9. **PKVY (Paramparagat Krishi Vikas Yojana)**: Promotes organic farming.

10. **Agri Infrastructure Fund**: Debt financing for post-harvest and community farming projects.

11. **Farmer Producer Organizations (FPOs)**: Promotes better income through organization.

12. **Per Drop More Crop (PDMC)**: Increases water use efficiency.

13. **Micro Irrigation Fund**: Established to enhance irrigation.

14. **Agricultural Mechanization**: Various initiatives to modernize farming.

15. **E-NAM**: Electronic trading portal for a unified national market for agricultural commodities.

16. **Kisan Rail**: Enhances logistics for farm produce.

17. **Start-up Ecosystem**: Creation in agriculture and allied sectors.

6.2 The Secondary Sector

Contribution:
❖ **30% of GVA**
❖ **12.1 crore employed**
Manufacturing:
❖ **78% of total production** from manufacturing
❖ **PMI (Jan 2023)**: 55.4
❖ **Improved Global Innovation Index**: 40th (2022)
Current Economic Policies:
❖ **GST (Goods and Services Tax)**: Replaced multiple taxes with a single tax (July 1, 2017).
❖ **Corporate Tax**: Reduced to 22% for domestic companies.
❖ **Make in India**: Focus on investment, innovation, and infrastructure (27 sectors).
❖ **Ease of Doing Business**: Ranked 63rd (2020).
❖ **Single Window System**: One-stop shop for investor approvals.
❖ **PM Gati Shakti**: Multi-modal infrastructure to cut logistics costs.
❖ **NLP (National Logistics Policy)**: Lower logistics costs.
❖ **PLI (Production Linked Incentive) Scheme**: Boost manufacturing and exports.

❖ **Industrial Corridors**: Develop greenfield regions.
❖ **FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles)-India**: Promote electric vehicle tech.
❖ **Udyami Bharat**: Empower MSMEs.
❖ **PM MITRA (PM Mega Integrated Textile Region and Apparel)**: Boost textile sector with world-class infrastructure.
❖ **FDI**: 100% in coal mining, coal sale, and insurance intermediaries.
❖ **FIFB (Foreign Investment Promotion Board)**: Simplified FDI approval, 39% increase.
❖ **RODTEP (Remission of Duties and Taxes on Export Products)**: Boost exports with tax rebates.
❖ **Start-up India**: Rank 40th in Global Innovation Index.
❖ **ECLGS (The Emergency Credit Line Guarantee Scheme)**: Emergency credit lines for lending institutions.
❖ **Focus**: Cloud computing, IoT, AI.
❖ **Manufacturing Policy**: Target 25% GDP share by 2025.

6.3 The Tertiary Sector

Growth Trajectory:
❖ **Largest sector** contributing 53.89% to GDP
❖ **Fastest-growing sector**; bypassing industrial phase

Key Characteristics:
❖ **Highest labor productivity**
❖ **100% FDI in telecommunications**
❖ **Insurance FDI limit** raised to 74%
Government Support:
❖ **National Single Window System**: Investor facilitation
❖ **FDI Policies**: 100% in telecom, 74% in insurance