CA Foundation

Part- 2

Paper-4: Business Economics

Section B: Macro Economics
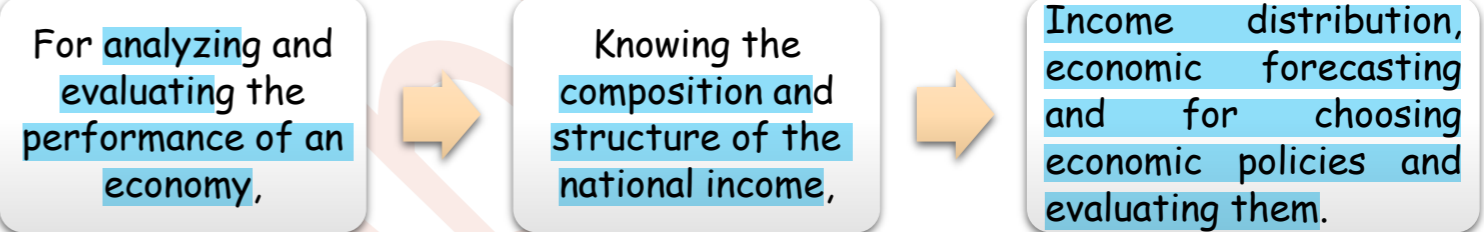
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Unit – 1: National Income Accounting

National Income Accounting

Defined as the net value of *all economic goods and services produced within* the domestic territory of a country in an accounting year *plus the net factor income from abroad*.

National income is the sum total of factor incomes generated by the *normal residents of a country* in the form of wages, rent, interest and *profit in an accounting year*.

Usefulness and Significance of National Income Estimates

For analyzing and evaluating the performance of an economy,

➡ Knowing the composition and structure of the national income,

➡ Income distribution, economic forecasting and for choosing economic policies and evaluating them.

Usefulness and Significance of National Income Estimates

Gross Domestic Product

Nominal GDP or GDP_{MP}	The value of *all final goods and services produced* in the country within a given period.
	Output of each of these is valued at its market price, and the *values are added together to get GDP_{MP}.*
Real GDP	Nominal GDP *increases over time for two reasons:*
	1. The production of most of goods increases over time
	2. The prices of most goods also increase over time.
	Real GDP is constructed as the *sum of the quantities of final goods times constant* (rather than current prices)
GDP Deflator	Calculation of real GDP gives us *a useful measure of inflation known as GDP deflator.*

$$= \frac{Nominal\ GDP}{Real\ GDP} \times 100$$

The GDP deflator is a *price index used to convert nominal GDP to real GDP*.

$$Real\ GDP = \frac{Nominal\ GDP}{GDP\ Deflator} \times 100$$

The deflator for the *base year is always 100.*
The GDP deflator, the inflation rate between two consecutive years can be compute using the following procedure:

$$= \frac{GDP\ deflator\ in\ year\ 2 - GDP\ deflator\ in\ year\ 1}{GDP\ deflator\ in\ year\ 1} \times 100$$

Net Domestic Product

Equal to *GDP minus depreciation*.
Total value of production minus the value of capital used up in producing that output.

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

Distinction between 'gross' and 'net' is depreciation or consumption of fixed capital.

Gross = Net + Depreciation or
Net = Gross – Depreciation

Net National Product at Market Prices (NNP_{MP})

$$NNP_{MP} = GNP_{MP} - Depreciation$$
$$NNP_{MP} = NDP_{MP} + Net\ Factor\ Income\ from\ Abroad$$
$$NNP_{MP} = GDP_{MP} + Net\ Factor\ Income\ from\ Abroad - Depreciation$$

Gross National Product (GNP)

$GNP_{MP} = GDP_{MP}$ + Factor income earned by the domestic factors of production employed in the rest of the world – Factor income earned by the factors of production of the rest of the world employed in the domestic territory.

The total income earned by a nation's permanent residents (called *nationals*).

$$GNP_{MP} = GDP_{MP} + Net\ Factor\ Income\ from\ Abroad$$
$$GDP_{MP} = GNP_{MP} - Net\ Factor\ Income\ from\ Abroad\ (NFIA)$$

NFIA=
Net compensation of employees + Net income from property and entrepreneurship + Net retained earnings

Net Factor Income from Abroad is positive, then GNP_{MP} would be greater than GDP_{MP}.

Distinction *between 'national' and 'domestic'* is net factor income from abroad.

National = Domestic + Net Factor

Gross Domestic Product at Factor Cost (GDP$_{FC}$)

= GDP$_{MP}$ - Indirect Taxes + Subsidies
OR
= Compensation of employees + Operating Surplus (rent + interest+ profit) + Mixed Income of Self-employed + Depreciation

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

Net Domestic Product at Factor Cost (NDP$_{FC}$)

It is sum of domestic factor incomes or domestic income net of depreciation.
NDP$_{FC}$ = NDPMP - Net Indirect Taxes OR
= Compensation of employees
+ Operating Surplus (rent + interest+ profit) + Mixed Income of Self-employed

Net National Product at Factor Cost (NNP$_{FC}$) or National Income

NNP$_{FC}$ = National Income = FID (factor income earned in domestic territory) + NFIA.
If NFIA is positive, then national income will be greater than domestic factor incomes.

Per Capita Income

GDP per capita is a measure of a country's economic output per person.
Obtained by dividing the country's gross domestic product, adjusted by inflation, by the total population.

Personal Income

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

PI = NI + income received but not earned - income earned but not received

PI = NI - Undistributed profits - Net interest payments made by households Corporate Tax +Transfer Payments to the households from firms & government.

Private Income

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

Disposable Personal Income (DI)

Disposable Personal Income (DI) that is available for their consumption or savings DI = PI - Personal Income Taxes

Net National Disposable Income (NNDI)

Net National Income + other net current transfers from the rest of the world (Receipts less payments)

NNI + net taxes on income and wealth receivable from abroad + net social contributions and benefits receivable from abroad.

Gross National Disposable Income (GNDI)

NNDI + CFC = GNI + other net current transfers from the rest of the world (Receipts less payments)

(Other Current Transfers refer to current transfers other than the primary incomes)

Domestic Income may be categorized into

Public sector= income from property and entrepreneurship accruing to government administrative departments and savings of non-departmental enterprises.

Private sector= NDP$_{FC}$ - Income from property and entrepreneurship accruing to government administrative departments - Savings of non-departmental enterprises.

Factor Cost vs Basic Price vs Market Price

The basic price is the subsidised price without tax.
Basic price = factor cost + Production taxes - Production subsidy

Relationship between Factor Cost and Basic Price

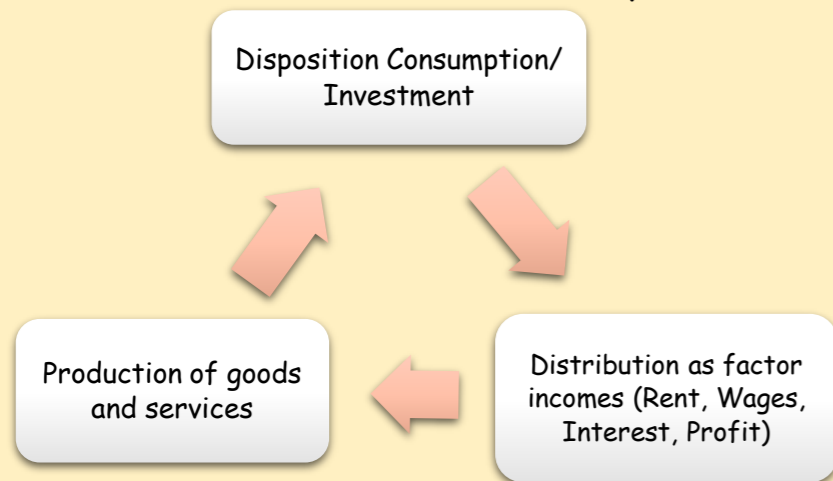• Factor cost + production tax - production subsidies = Basic prices.

Relationship between Basic Price and Market Price

• Basic Price + Product tax - Product Subsidy = Market Price.

The Circular Flow of Income

The continuous circulation of production, income generation and expenditure involving different sectors of the economy.

There are three different interlinked phases:

Disposition Consumption/ Investment

Production of goods and services

Distribution as factor incomes (Rent, Wages, Interest, Profit)

Three methods of measuring National Income:

Value Added Method or Product Method

The *sum total of net value added* at factor cost across all producing units of the economy. This *method involves the following steps:*

Step 1
Identifying the producing enterprises and classifying them into different sectors according to the nature of their activities.

Step 2
Estimating the gross value added (GVA_{MP}) by each producing enterprise

= Value of output – Intermediate consumption OR

= (Sales + change in stock) – Intermediate consumption

Step 3
Estimation of National income.

For each *individual unit*

$\Sigma(GVA_{MP})$ – Depreciation = Net value added (NVA_{MP})

For the *economy as a whole*

Net value added (NVA_{MP}) – Net Indirect taxes = Net Domestic Product (NVA_{FC})

Net Domestic Product (NVA_{FC}) + (NFIA) = National Income (NNP_{FC})

Income Method

Whatever is produced by a producing unit is distributed among the factors of production for their services.

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

(*Note:* Interest paid by the government on public debt, interest on consumption loans and interest paid by one firm to another are excluded. **Profit =Corporate taxes+ dividend retained + earnings**)

capital gains, windfall profits, transfer incomes and income from sale of second-hand goods and financial assets and payments out of past savings are not included.

Expenditure Method

Also called Income Disposal Approach, national income is the aggregate final expenditure in an economy during an accounting year.

$GDP_{MP} = \sum Final\ Expenditure$

$GDP_{MP} = C + GDFC + NX$

$GNP_{MP} = GDP_{MP} + NFIA$

$GNP_{FC} = GNP_{MP} - NIT$

$NNP_{FC} = GNP_{FC} - Depreciation$

Limitations and Challenges of National Income Computation

(a) lack of an agreed definition of national income,

(b) issue of transfer payments,

(c) services of durable goods,

(d) valuation of a new good at constant prices, and

(e) valuation of government services

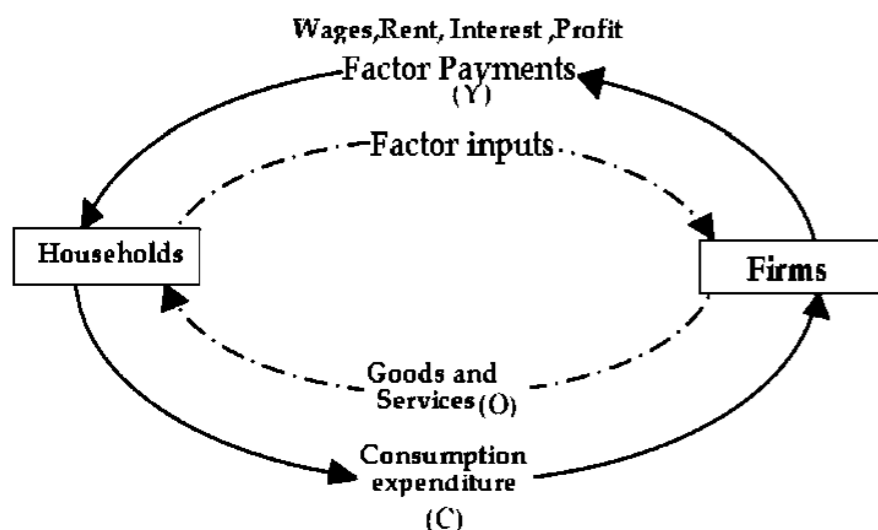## Unit – 2: The Keynesian Theory of Determination of National Income

Important Note

John Maynard Keynes in his masterpiece **'The General Theory of Employment Interest and Money'** published in 1936 put forth a comprehensive theory to explain the determination of equilibrium aggregate income and output in an economy.

The equilibrium analysis is best understood with _a hypothetical simple a two-sector economy_ which has only households and firms with all prices (including factor prices), supply of capital and technology constant; the total income produced Y, accrues to the households and equals their disposable personal income.

The equilibrium output occur when the desired amount of output demanded by all the agents in **the** _economy exactly equals the amount produced in a given time period._

Circular Flow in a Simple Two-Sector Model

Wages, Rent, Interest, Profit
-Factor Payments-
(Y)

-Factor inputs-

Households   Firms

Goods and
Services (O)

Consumption
expenditure
(C)

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

The circular broken lines with arrows show factor and product flows and present _'real flows'_ and the continuous line with arrows show _'money flows'_ which are generated by real flows.

| Real flows refer to the flow of the actual goods or services | Money flows refer to the payments for the services (wages) or consumption payments. |

There are no injections into or leakages from the system.

Factor Payments = Household Income = Household Expenditure = Total Receipts of Firms = Value of Output.

Two sector model assumption:

(a) Only two sector in the economy viz household and firms

(b) No government sector: No tax, No govt. expenditure, No transfer payment

(c) No foreign trade

(d) Factor price, product price, supply of capital and technology, all are constant

(e) No retained earning

(f) No any injection into or leakage from the system

(e) High rate of unemployment

Aggregate Demand Function

$$AD = C + I$$
$$AD = C + \bar{I}$$

C = Aggregate demand of consumer goods

I = Aggregate demand for investment goods

$\bar{I}$ = constant investment.

Consumption Function

Consumption function expresses the functional relationship between aggregate consumption expenditure and aggregate disposable income, expressed as: $C = f(Y)$
$$C = a + bY$$

C = Aggregate consumption expenditure

a = Constant term which denotes the value of consumption at zero level of disposable income

b = Marginal propensity to consume [MPC $=\Delta C \div \Delta Y = b$]

Y = Total disposable income

Keynesian Consumption Function

C

C=f(Y)

Slope = b

Consumption

b

a
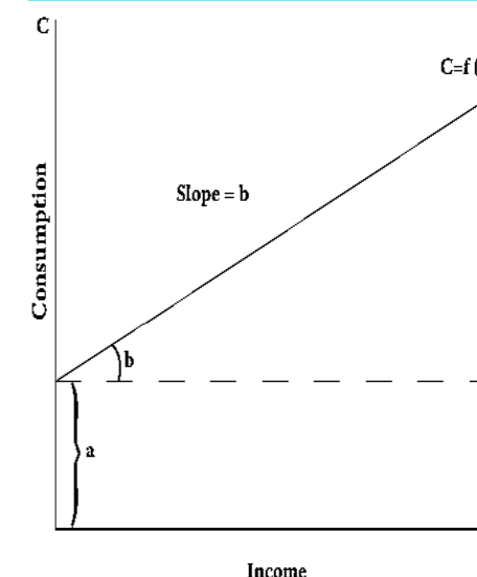
Income   Y

The Keynesian assumption is that consumption increases with an increase in disposable income. But increase in consumption will be less than the increase in disposable income i.e. _0 < b < 1_. This fundamental relationship between income and consumption plays a crucial role in the Keynesian theory of income determination.

Marginal Propensity to Consume (B)

The value of the increment to consumer expenditure per unit of increment to income.

$$MPC = \Delta C / \Delta Y$$

ΔC = Change in consumption

ΔY = Change in income

The MPC is not necessarily constant for all changes in income (in fact, the MPC tends to decline at higher income levels), most analysis of consumption generally works with a constant MPC.

Average Propensity To Consume

The ratio of total consumption to total income.

$$APC = C/Y$$

The proportion of income spent on consumption decreases as income increases.

Saving Function

National income $Y = C + S$ which shows that disposable income is, by definition, consumption plus saving. Therefore, $S = Y - C$.

Marginal Propensity to Save

This increment to saving per unit increase in disposable income (1 - b).

$$\Delta S / \Delta Y \text{ or } 1-b$$

Saving is an increasing function of the level of income i.e. saving increase as income increases.

Average Propensity to Save

The ratio of total saving to total income is called average propensity to save (APS).

$$APS = \frac{Total\ Saving}{Total\ Income} = \frac{S}{Y}$$

Consumption & Saving Function

Y1 income level, consumption is more than income. Saving is negative. Y1 income level, consumption is less than income and saving is positive. At Y1 income level, consumption and income is equal and saving is zero.

As level of income increase, Average propensity to consume decrease and Average propensity to saving increase.
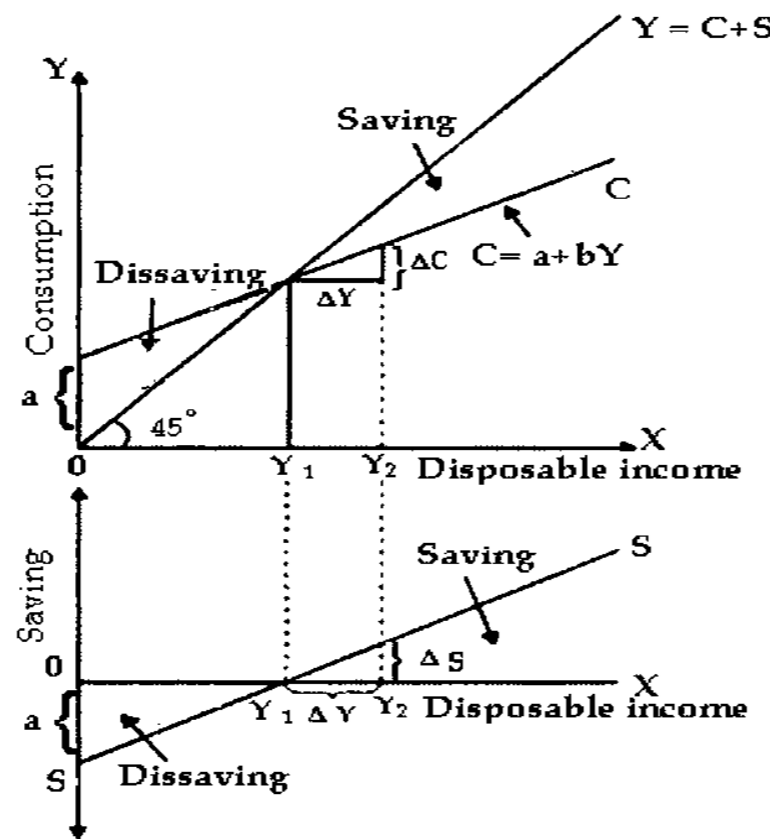
Aggregate Supply

Ex-ante or planned aggregate supply is the total supply of goods and services which firms in a national economy plan on selling during a specific time period. It is equal to the national income of the economy, which is either consumed or saved.

$$AS = C + S$$

Two-Sector Model of National Income Determination
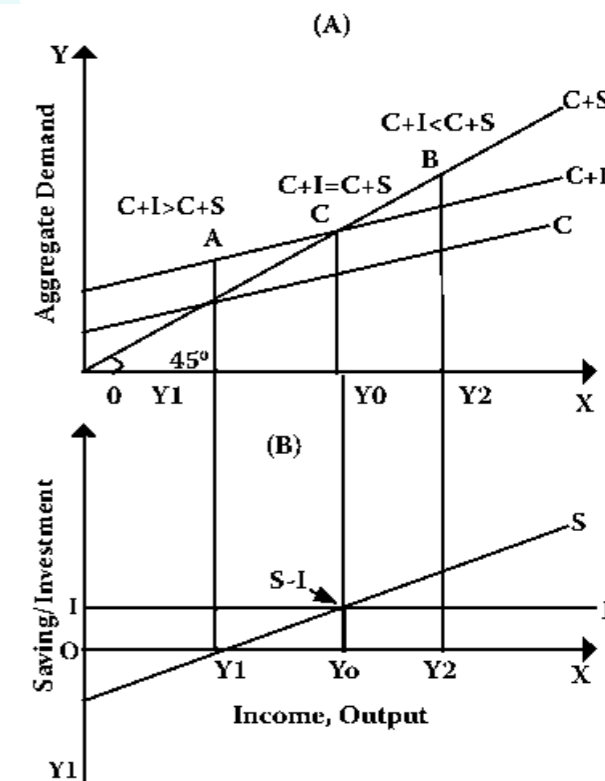
The equilibrium level of national income is a situation in which aggregate demand (C+ I) is equal to aggregate supply (C + S) OR I = S.

If C+I > C+S

- an increase in aggregate spending makes the aggregate demand schedule shift upward.
- As a result, the equilibrium point would shift upward causing an increase in the national income.

If C+I < C+S

- an decrease in aggregate spending makes the aggregate demand schedule shift downward.
- As a result, the equilibrium point would shift downward causing an decrease in the national income.

Equilibrium with Unemployment or Inflation

Aggregate expenditure <u>line intersects the 45-degree line at the level of potential GDP</u>, then there is full employment equilibrium.

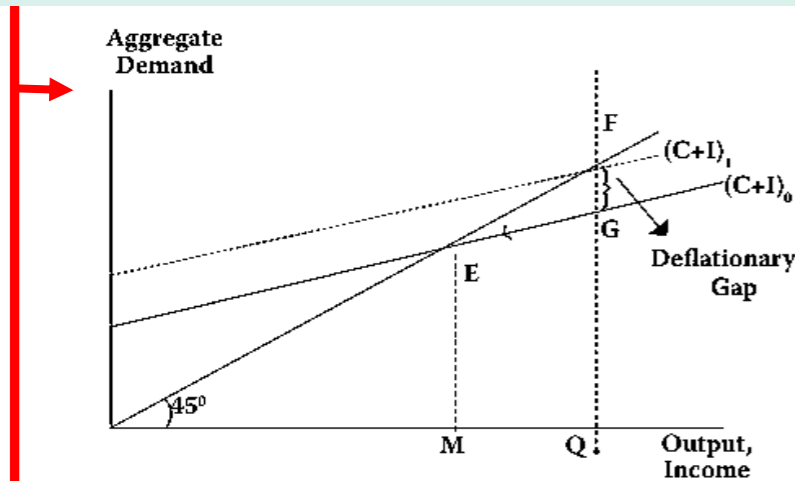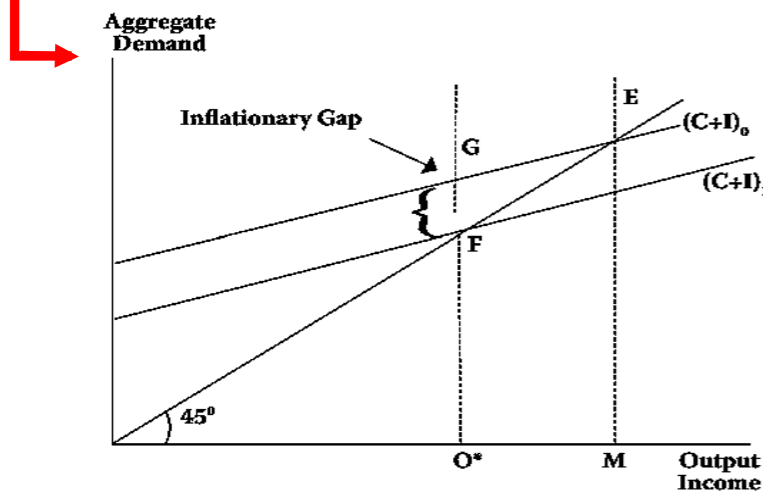If the aggregate demand is for an amount of output less than the full employment level of output, then we say there is deficient demand. Deficient demand gives rise to a *'deflationary gap' or 'recessionary gap'*

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

Investment Multiplier

Investment multiplier explains how many times the aggregate income increases as a result of an increase in investment. When the level of investment increases by an amount says ΔI, the equilibrium level of income will increase by some multiple amounts, ΔY. The ratio of ΔY to ΔI is called the investment multiplier, k.

$$k = \Delta Y / \Delta I$$

Effect of Changes in Autonomous Investment
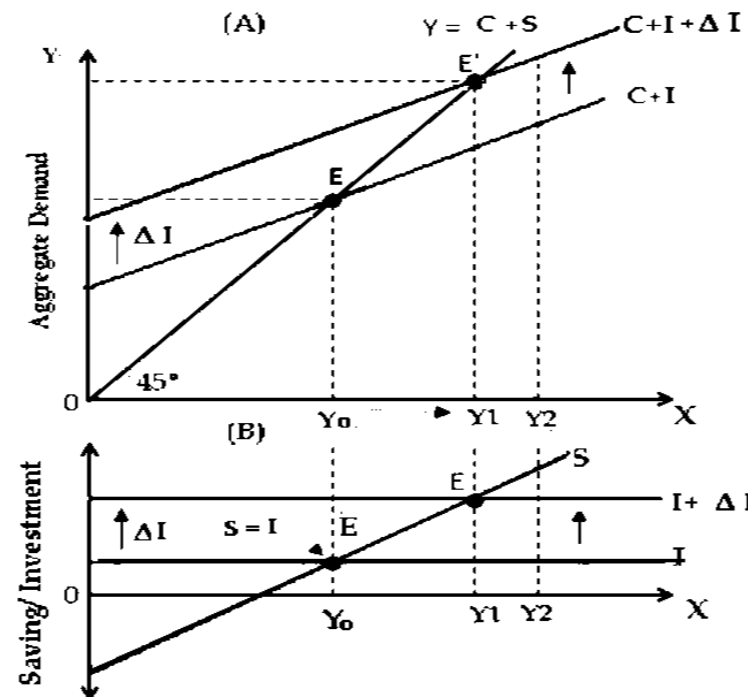
Multiplier expresses the relationship between an initial increment in investment and the resulting increase in aggregate income. As per investment multiplier, when there is an increase in investment, change in income is more than change in investment. It is due to marginal propensity to consume.
Higher the marginal propensity to consume, higher the investment multiplier and vice versa.

$$k = 1/1 - MPC \text{ or } 1/MPC$$

MPC is one, investment multiplier is infinite

MPC is zero, investment multiplier is one

MPC is low, investment multiplier is low

MPC is high, investment multiplier is high

Circular Flow Three-Sector Model
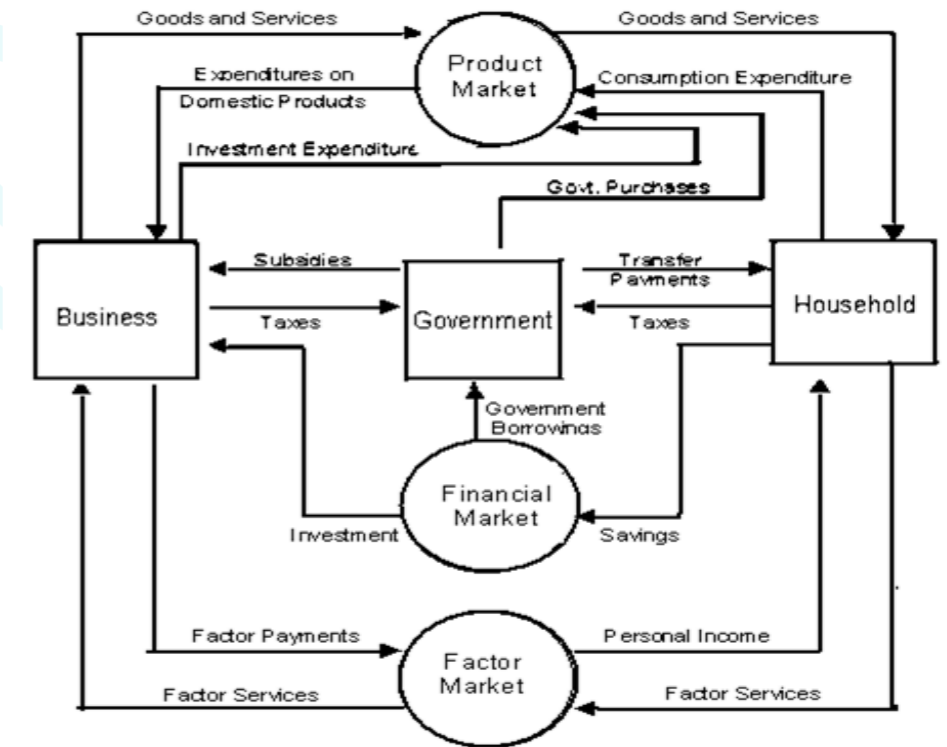
$$Y = C + I + G$$

The three-market circular flow model which accounts for <u>government intervention highlights the role played by the government sector.</u>
i) Taxes on households and business sector to fund government purchases
ii) Transfer payments to household sector and subsidy payments to the business sector
iii) Government purchases goods and services from business sector and factors of production from household sector, and
iv) Government borrowing in financial markets to finance the deficits occurring when taxes fall short of government purchases

Three-Sector Model of National Income Determination
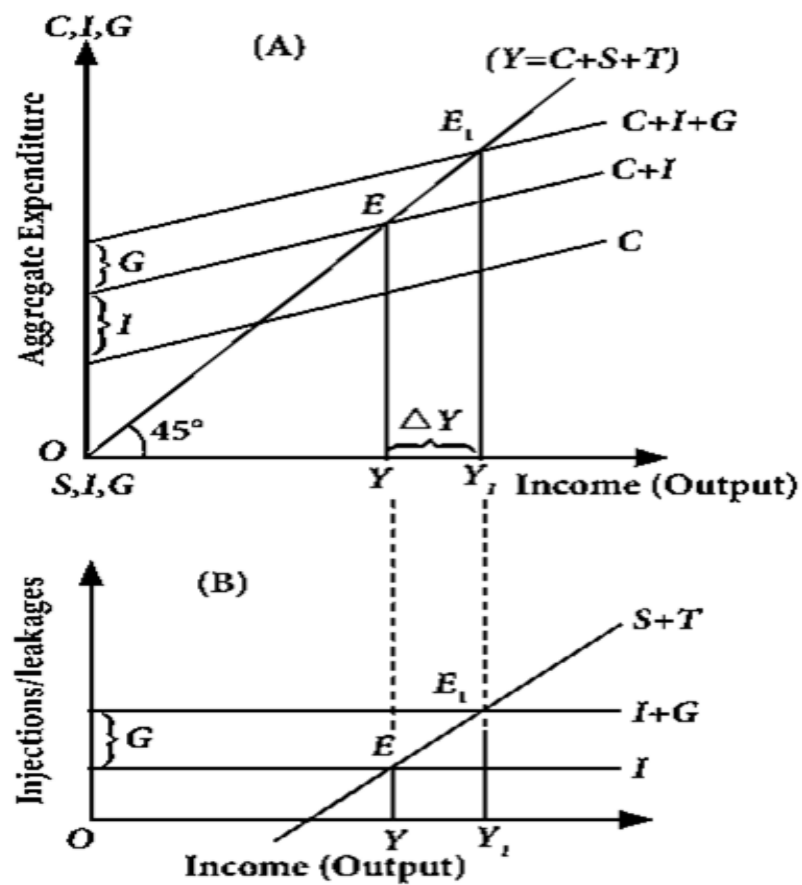
Aggregate demand function = C+I+G
supply function = C + S + T
G= Government expenditure; T = Tax
Equilibrium is identified as the intersection between the <u>C+I+G</u> line and the <u>45- degree line</u>. <u>The equilibrium income is Y1</u>.

If C+I+ G > C+S+T

- An increase in aggregate spending makes the aggregate demand schedule shift upward.
- Result: The equilibrium point would shift upward causing an increase in the national income.

If C+I+G < C+S+T

- An decrease in aggregate spending makes the aggregate demand schedule shift downward.
- Result: The equilibrium point would shift downward causing an decrease in the national income.

Government Sector and Income Determination

1. Income Determination with Lump Sum Tax

$$C = a + b\ Y_d$$

Yd = Y –T (disposable income), T = lump sum tax

$$Y= a + b\ (Y - T) + I + G$$
$$Y = 1/1 - b\ (a - bT + I + G)$$

2. Income Determination with tax as a function of Income

Consumption function is $C = a + b\ Y_d$

$Y_d = Y - T + TR$ [T is a lump sum tax and TR is autonomous transfer payments]

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

$Y = a + b\ (Y - T + TR) + I + G$
$Y = a + bY - bT + bTR + I + G$
$Y - bY = a - bT + bTR + I + G$
$Y(1-b) = a - bT + bTR + I + G$
$$Y = \frac{1}{1-b}\ (a - bT + bTR + I + G)$$

3. Income Determination with tax as a function of Income

Tax function: **Tax function T = T+ t Y**

T= autonomous constant tax; t = income tax rate
T = total tax

Consumption function: $C = a + b\ Y_d$

Where Y_d = Y- T or Y -T- t Y

$$C = a + b(Y - T - t\ Y)$$

Equilibrium level $Y = C + I + G$

$Y = a + bYd + I + G;$ $Y = a + b(Y - T - tY) + I + G$

$Y = a + bY - bT - b\ t$

$Y + I + G\ Y - bY + btY = a - bT + I + G$

$Y\ (1 - b + bt) = a - bT + I + G;$ $Y = 1/1 - b(1-t)\ (a - bT + I + G)$

1/1-b(1-t) (represent the tax multiplier)

Circular Flow Four-Sector Model
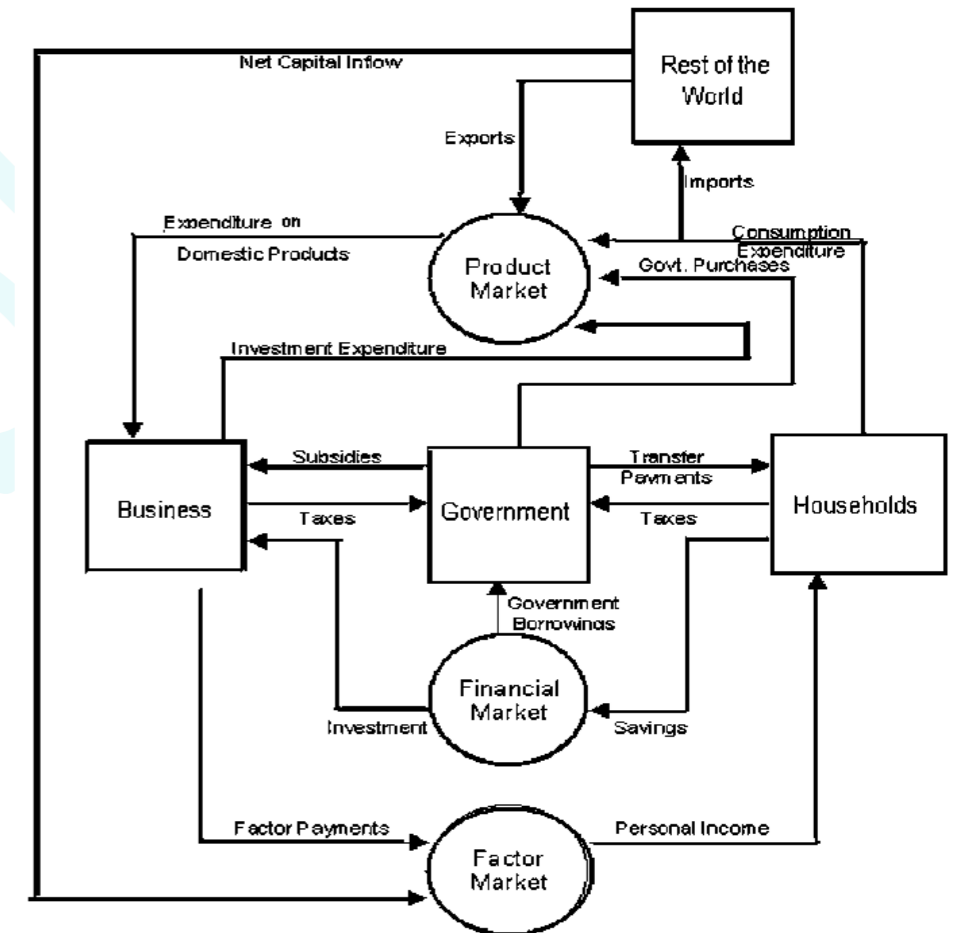
- The four-sector model includes all four macroeconomic sectors, the household sector, the business sector, the government sector, and the foreign sector and in equilibrium,

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

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

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

Four-Sector Model of National Income Determination
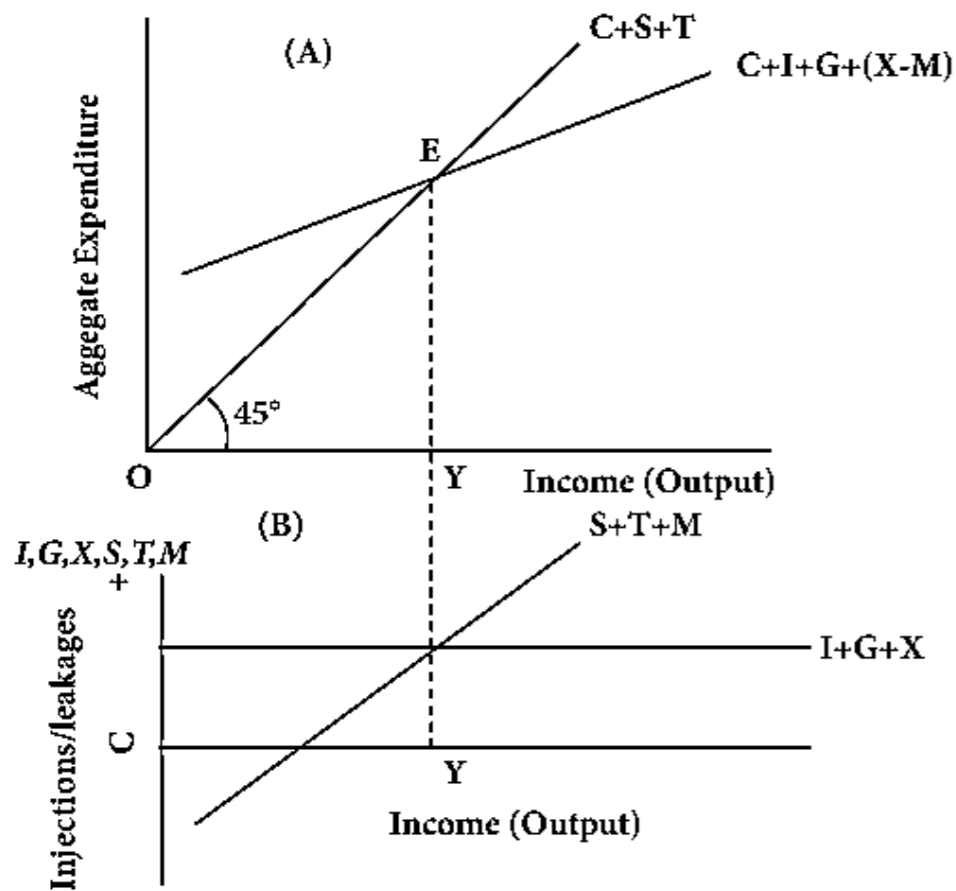
net exports are positive (X > M)

- there is net injection and national income increases.

if X<M,

- there is net withdrawal and national income decreases.

The autonomous expenditure multiplier in a four-sector model includes the effects of foreign transactions and is stated as $\frac{1}{1-(b+m)}$ against $\frac{1}{(1-b)}$ in a closed economy.

The greater the value of y, the lower will be the autonomous expenditure multiplier.

An increase in the demand for exports of a country is an increase in aggregate demand for domestically produced output and will increase equilibrium income just as would an increase in government spending or an autonomous increase in investment.

Unit - 1: Fiscal Functions: An Overview, Centre & State Finance

Public Finance

►Since the *1930s,* the traditional functions of the state have been supplemented with the economic functions (also *called the fiscal functions or the public finance function*)

►*Richard Musgrave (1959)* introduced the *three-branch taxonomy* of the role of government in a market economy namely, *resource allocation, income redistribution and macroeconomic stabilisation*.

Role of Government in an Economic System

The *allocation and distribution* function are microeconomic function and *stabilization* is macroeconomic function. The allocation function aims to correct the sources of inefficiency in the economic system while the distribution role ensures that the distribution of wealth and income is fair.

Monetary and fiscal policy, the problems of macroeconomic stability, maintenance of high levels of employment and price stability etc fall under the stabilization function.

Allocation Function

1. Meaning of Resource Allocation
Resource allocation is the allocation of available resources in an economy, determining the production of goods and services, as resources are limited and have multiple uses.

2. Reason of Resource Allocation
Allocation of resources is based on demand and supply in market. In the absence of govt. intervention, market failure may occur. It means resources are misallocated by too much production of certain goods and too little production of certain other goods. The main purpose of allocation function is *maximizing social welfare*.

Market failures which hinder efficient allocation of resources occur mainly due to the following reasons:

(a) Imperfect competition and presence of monopoly in the market which reduce welfare of consumers

(b) Failure of market to provide collective goods which is consumed commonly by all the people.

(c) Externalities exist

(d) Factor immobility which causes unemployment and inefficiency

(e) Imperfect information

(f) Inequalities in the distribution of income and wealth.

Redistribution Function

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

The distribution function of the government aims at:

redistribution of income to achieve an equitable distribution of societal output among

households ensuring increased overall social welfare

advancing the well-being of those members of the society who suffer from deprivations of different types

providing equality of income, wealth and opportunities

providing security (in terms of fulfillment of basic needs) for people who have hardships, and ensuring that everyone enjoys a minimum standard of living

Stabilization Function

♦ One of the _key functions of fiscal policy and aims at eliminating macroeconomic fluctuations_ arising from suboptimal allocation.

♦ Concerned _with the performance of the aggregate economy in terms_ of labour employment and capital utilization, overall output and income, general price levels, economic growth and balance of international payments.

♦ Government's stabilization intervention may be through _monetary policy as well as fiscal policy_. Monetary policy has a singular objective of controlling the size of money supply and interest rate in the economy, while fiscal policy aims at changing aggregate demand by suitable changes in government spending and taxes.

The stabilization function is concerned with the performance of the aggregate economy in terms of:

Labour employment and capital utilization

↓

Overall output and income

↓

General price level

↓

Balance of international payments

↓

The rate of economic growth
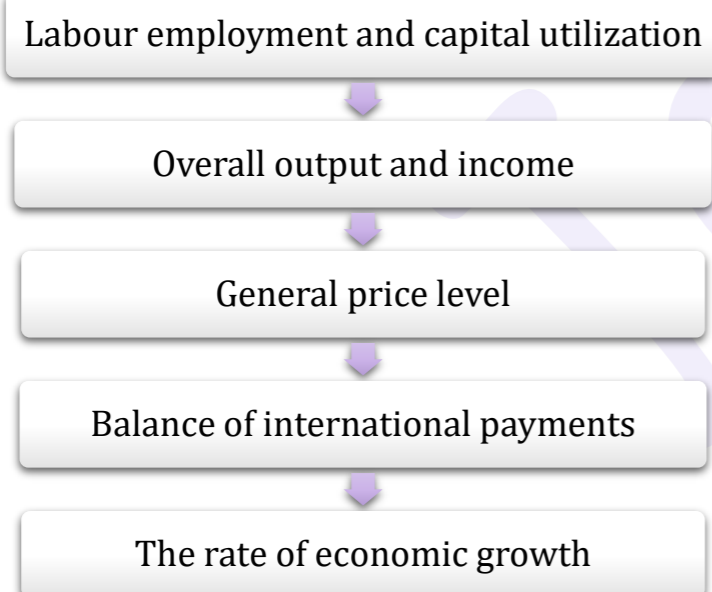
Fiscal policy

Government expenditure policy and taxation policy to affect economic activities like production, investment, saving, inflation, income, demand etc. Expansionary fiscal policy _is adopted to end recession and contractionary_ fiscal policy is resorted to for controlling inflation.

Centre and State Finance

♦ Fiscal federalism _deals with the division of governmental functions and financial relations_ among the different levels of government.

♦ The central government should be responsible for the economic stabilization and income redistribution, _but the allocation of resources should be the responsibility_ of state and local governments.

♦ _Articles 268 to 281_ of the constitution contain specific provisions in respect of distribution of finances among states.

Unit - 2: Market Failure

Public Finance

▶"Market failure" _refers to a market that is not functioning properly, but_ rather, it does not function as it should.

▶Market failure occurs when the free market _leads to misallocation of resources_, resulting in over or underproduction of goods and services, leading to _less-than-optimal outcomes_.

Two types of market failure namely;

Complete market failure occurs when the market fails to supply products and services despite their high demand, resulting in "missing markets."

Partial market failure occurs when the market functions but produces the wrong quantity or price, leading to economic welfare loss.

Reasons of Market Failure

1. Market Power

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

2. Externalities

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

Positive and Negative externalities

Negative production externalities
- A negative externality initiated in production which imposes an external cost on others may be received by another in consumption or in production.

Positive production externalities
- A positive production externality initiated in production that confers external benefits on others may be received in production or in consumption.

- Negative consumption externalities initiated in consumption which produce external costs on others may be received in consumption or in production. → **Negative consumption externalities**

- A positive consumption externality initiated in consumption that confers external benefits on others may be received in consumption or in production. → **Positive consumption externalities**

Private cost — the money cost of production incurred by the firm

wages, raw materials, heating and lighting

supply curve here corresponds to only the private marginal costs.

Social costs — Social cost are private cost borne by individuals directly involved in a transaction together with the external cost borne by the third parties not directly involved in the transaction.

Social Cost = Private Cost + External Cost

External costs are not included in firms' income statements or consumers' decisions.

3. Public Goods

Paul A. Samuelson who introduced the concept of 'collective consumption goods' in his path breaking **1954** paper 'The Pure Theory of Public Expenditure'

Public goods _do not conform_ to the settings of market exchange and left to the market, they will not be produced at all or will be underproduced. This is because the _price becomes zero_.

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

Classification of Public Goods

	Excludable	Non-excludable
Rivalrous	**Private goods:** -Less likely to have the free rider problem. -Additional resource costs are involved for providing to another individual. -**Example:**Food, clothing, cars etc.	**Common resources:** -A special class of impure public goods. -Generally available free of charge. -Price mechanism does not apply. -Overuse of them cause their depletion and degradation. -**Example:**Fish stocks, forest resources, coal etc.
Non-rivalrous	**Club goods:** - Are some goods which is neither pure private goods nor pure public goods. -Also called impure public goods. -**Example:** Cinemas, private parks, satellite television etc.	**Pure public goods:** -No direct payment by the consumer. -The good is provided, one individual cannot deny other individuals' consumption. -**Example:** National defence

4. Incomplete Information

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

Asymmetric Information

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

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

Moral Hazard
- opportunism characterissed by an informed person's taking advantage of a less-informed person through an unobserved action.

Government Interventions to Minimise Market Failure

►Because of the social costs imposed by monopoly, governments intervene by establishing rules and regulations designed to promote competition and prohibit actions that are likely to restrain competition.

►*Example:* Competition Act, 2002 (as amended by the Competition (Amendment) Act, 2007).

►Natural monopolies can produce the entire output of the market at a cost that is lower than what it would be if there were several firms. *Examples* of such natural monopoly are electricity, gas and water supplies

Government Interventions to Correct Externalities

►One method of ensuring internalization of negative externalities is imposing pollution taxes. Pigouvian taxes by 'making the polluter pay', seek to internalize external costs into the price of a product or activity.
►Pollution taxes are difficult to determine and administer due to difficulty to discover the right level of taxation, problems associated with inelastic nature of demand for the good and the problem of possible capital flight.
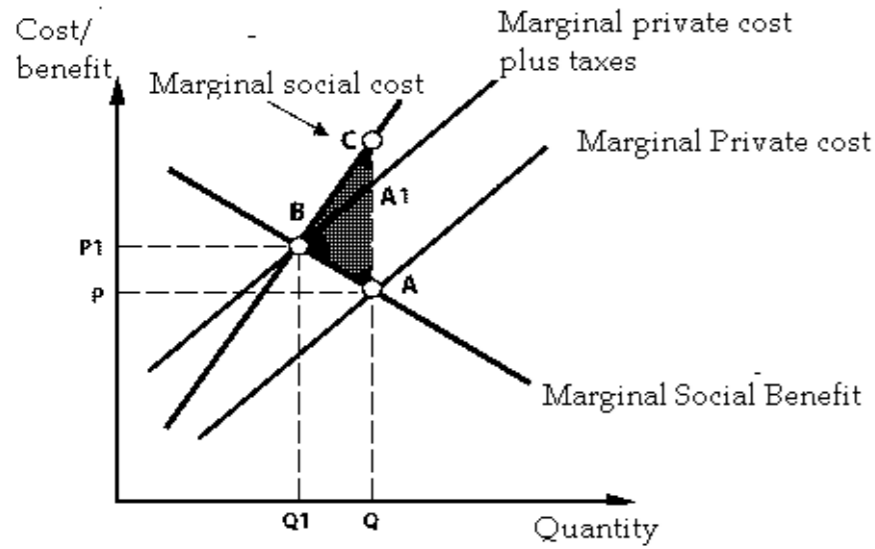
▶ The second approach Tradable emissions permits, also known as _cap-and-trade_, are marketable licenses for polluters to emit limited quantities of pollutants, allowing for different pollution levels across regulated entities.

▶ _Permit allocation aims_ for maximum emissions, creating a shortage and creating a positive price for pollution. _High polluters pay more_, while low polluters profit from surplus permits.

Effect of Subsidy on Output
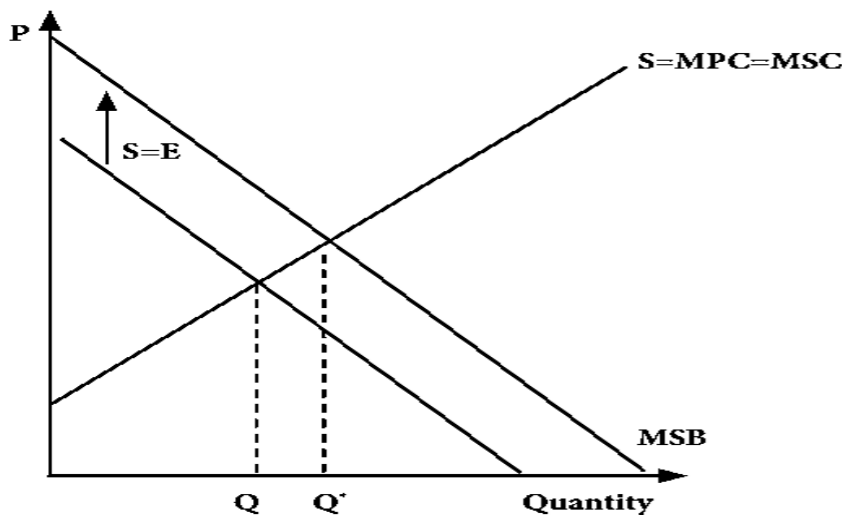
Subsidy is _market-based policy and involves_ the government paying part of the cost to the firms in order to _promote the production of goods having positive externalities_.

Two of the _most common types of individual subsidies are_ welfare payments and unemployment benefits.

Government Intervention in the case of Merit Goods

Merit goods such as education, health care etc are _socially desirable and have substantial positive externalities_. Left to the market, merit goods are likely to be underproduced and under-consumed so that _social welfare will not be maximized_.

The _possible government responses_ to under-provision of merit goods are regulation, legislation, subsidies, direct government provision and a combination of government provision and market provision.
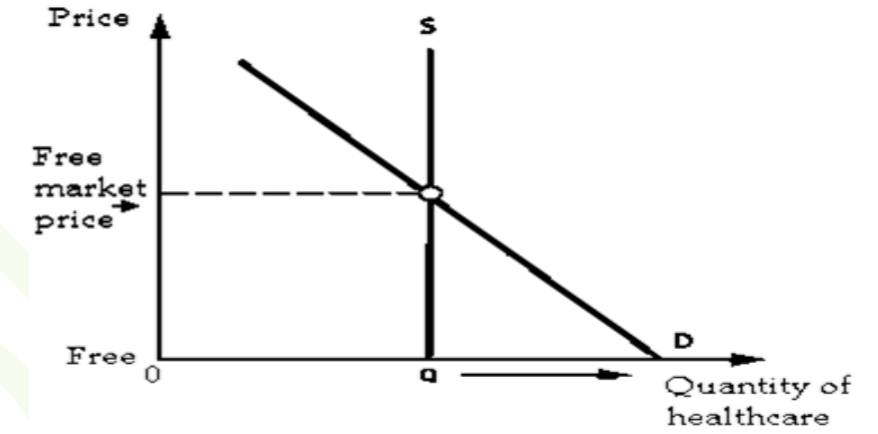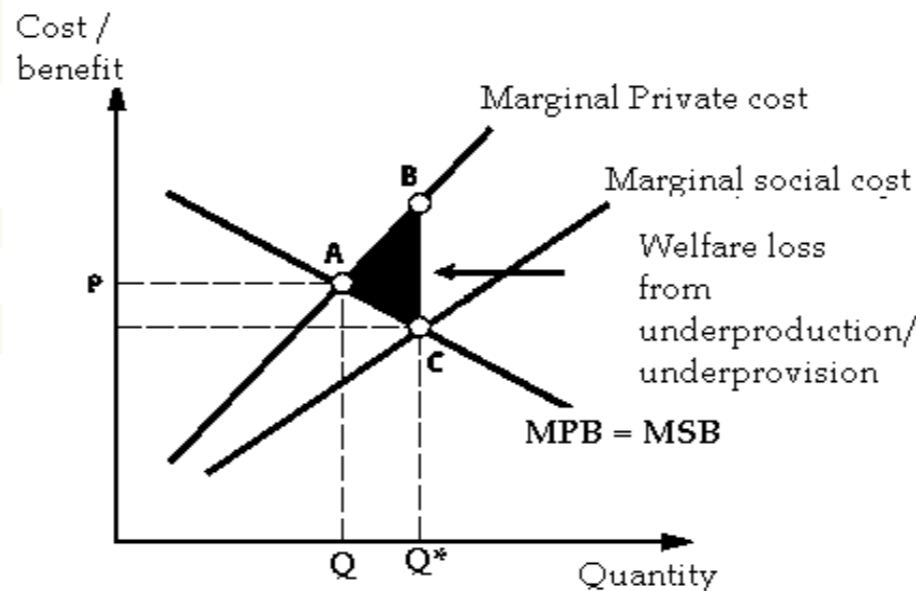
▶ When merit goods are directly provided _free of cost by government,_ there will be substantial demand for the same. If provided free at zero prices, the demand OD far exceeds supply.

Government Intervention in the case of Demerit Goods

Demerit goods are goods which impose significant negative externalities on the society as a whole and are believed to be socially undesirable.

The production and consumption of demerit goods are likely to be more than optimal under free markets. The government should therefore intervene in the marketplace to discourage their production and consumption.
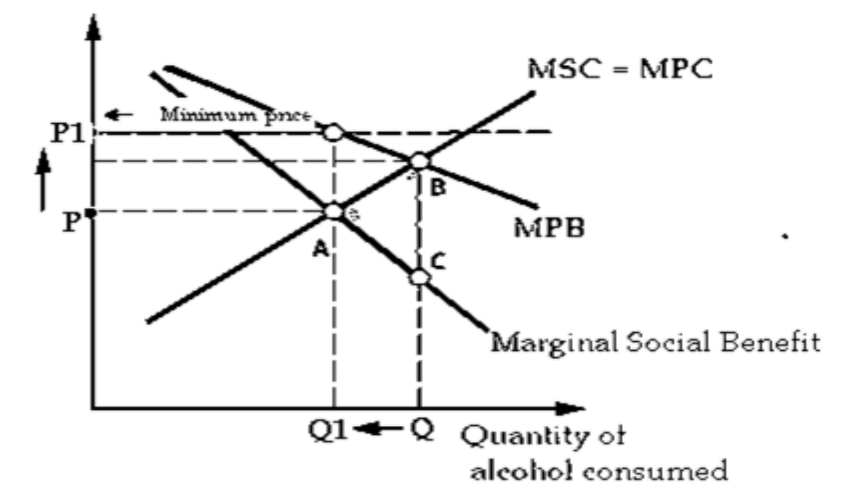
Government Intervention in the Case of Public Goods

►In the case of *non-excludable pure public goods where entry fees cannot be charged*, direct provision by governments through the use of general government tax revenues is the only option.

►A very commonly followed method in the case of *excludable public good is to grant licenses to private firms to build a facility* and then the government regulates the level of the entry fee chargeable from the public.

Price Intervention: Non-Market Pricing

Price controls may take the form of either a price floor (a minimum price buyers are required to pay) or a price ceiling (a maximum price sellers are allowed to charge for a good or service).

With the objective of ensuring stability in prices and distribution, governments often intervene in grain markets through building and maintenance of buffer stocks.

Market Outcome of Minimum Support Price
Government usually intervenes in many primary markets which are subject to extreme as well as unpredictable fluctuations in price
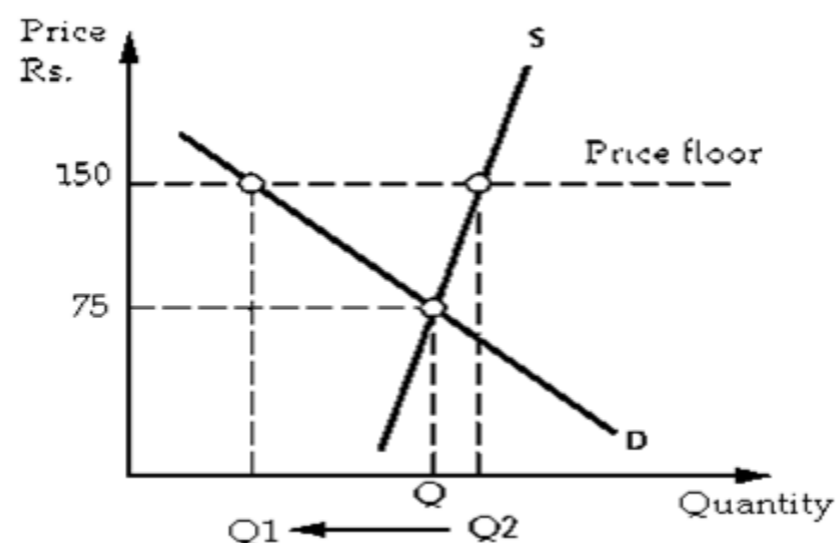
Market Outcome of Price Ceiling
When prices of certain essential commodities rise excessively government may resort to controls in the form of price ceilings (also called maximum price) for making a resource or commodity available to all at reasonable prices.
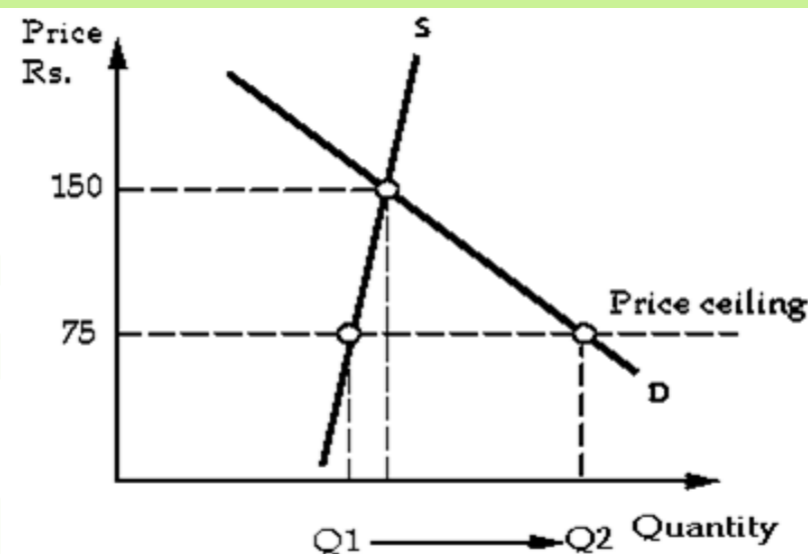
Government Intervention for Correcting Information Failure

Makes it mandatory to have accurate labeling and content disclosures by producers.

Public dissemination of information.

Regulation of advertising and setting of advertising standards.

Government Intervention for Equitable Distribution

►Government failure occurs when intervention is ineffective causing wastage of resources expended for the intervention and/or when intervention produces fresh and more serious problems. This creates inefficiency and leads to a misallocation of scare resources.

Unit – 3: The Process of Budget Making: Sources of Revenue, Expenditure Management and Management of Public Debt

Budget Statement

▪ A budget is *a statement that presents* the details of *'where the money comes from' and 'where the money goes to'*.

▪The budget is prepared by the Ministry of Finance in consultation with NITI Aayog and other relevant ministries. The budget must be presented and approved by both houses of parliament before the beginning of the fiscal year (April 1 to March 31).

The Process of Budget Making

▪ **The budgetary procedures are –**
(i) Preparation of the budget
(ii) Presentation and enactment of the budget and
(iii) Execution of the budget.

▪ **Annual Financial Statement shows the receipts and expenditure of the government in three separate parts:**
1. Consolidated Fund of India
2. Contingency Fund of India, and the
3. Public Account.

Sources of Revenue

Department of Revenue exercises control in respect of matters relating to *all the direct and indirect union taxes through two statutory boards*:
1. the Central Board of Direct Taxes **(CBDT)** and
2. the Central Board of Indirect Taxes and Customs **(CBIC)**.

Government receipts

Revenue receipts	Capital receipts

Tax Revenue	**Non-Debt**
• Corporation tax; Taxes on income; Wealth tax; Customs duties; Union excise duties; Goods and services tax including GST compensation cess; Taxes on union territories	• (a) Recoveries of loans and advances • (b) Miscellaneous capital receipts (disinvestments and others)
	Debt
• Centre's net tax revenue and the National Calamity Contingent duty (NCCD) transferred to the National Calamity Contingency.	• (a) Market loans for different purposes • (b) Short term /Treasury bill borrowings • (c) Securities issued against small savings, • (d) State provident fund (Net) • (e) Net external debts • (f) Other receipts (Net)
Non-Tax Revenues	
• Interest receipts, Dividends and profits from public sector enterprises and surplus transfers from Reserve Bank of India; Other Non-tax revenues and Receipts of union territories	

Public Expenditure Management

▪ Public expenditure management is the *process that allows governments to be fiscally responsible*. Public expenditure programmes or projects should be designed and implemented to provide given levels of outputs or achieve specific objectives at minimum cost.

Public Debt Management

Government debt from internal and external sources contracted in the Consolidated Fund of India is *defined as Public Debt.*

Public debt management *refers to the task of determining, by the fiscal and monetary authorities,* the size and composition of debt, the maturity pattern, interest rates, redemption of debt etc. It is the process of setting up and implementing the strategy for managing public debt in order to raise the *required amount of funding at the desired risk and cost levels*.

Institutions responsible for public debt management are:	
Reserve Bank of India	Domestic marketable debt i.e., dated securities, treasury bills and cash management bills
Ministry of Finance (MOF)	external debt
Ministry of Finance; Budget Division and Reserve Bank of India	Other liabilities such as small savings, deposits, reserve funds etc

Type of budgets

Balanced budget

A budget in which revenues are equal to expenditures

Revenue does not fall short of expenditure. i.e., revenue is equal to expenditure

(Revenue = Expenditure)

Unbalanced budget

Surplus budget

when estimated govt receipts are more than the estimated govt expenditure it is termed as surplus budget.

public revenue exceeds public expenditure *(R>E)*

Deficit budget

- when estimated govt receipts are less than the govnt expenditure, it is termed as a deficit budget.
- public expenditure exceeds public revenue *(E>R)*

Capital Receipts & Revenue Receipts

Capital Receipts

-Those receipts that lead to a reduction in the assets or an increase in the liabilities of the government

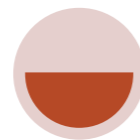-Recoveries of loans, earnings from disinvestment and debt.

Revenue Receipts

-Those receipts which neither create any liability nor cause any reduction in the assets of the government

-Two sources of revenue receipts: tax revenues and non-tax revenues

Revenue Expenditure & Capital Expenditure

Revenue Expenditure

Expenditure incurred for purposes other than creation of physical or financial assets of the central government.

Capital Expenditure

Expenditures of the government which result in creation of physical or financial assets or reduction in financial liabilities.

A government spends more than it collects by way of revenue, it incurs a budget deficit.

Revenue Deficit

The excess of government's revenue expenditure over revenue receipts.

The shortfall of the government's current receipts over current expenditure.

Revenue deficit = Revenue expenditure – Revenue receipts

Fiscal Deficit

Total Receipts excluding borrowing = Revenue Receipts + Capital Receipts excluding borrowing or (Non debt creating capital receipts).

Non debt creating capital receipts include recoveries of loans advanced by the government and sale proceeds of government assets, including those released from divestment of government equity in public sector undertakings (PSUs).

Primary Deficit

- Primary deficit thus gives an estimate of borrowings on account of current expenditure exceeding current revenues. The goal of measuring primary deficit is to focus on present fiscal imbalances.
- *Primary deficit = Fiscal deficit – Net Interest liabilities*
- Net interest liabilities interest payments minus interest receipts by the government on domestic lending.

Outcome budget

- a direct link between budgetary allocations of schemes and its annual performance targets measured through output and outcome indicators.
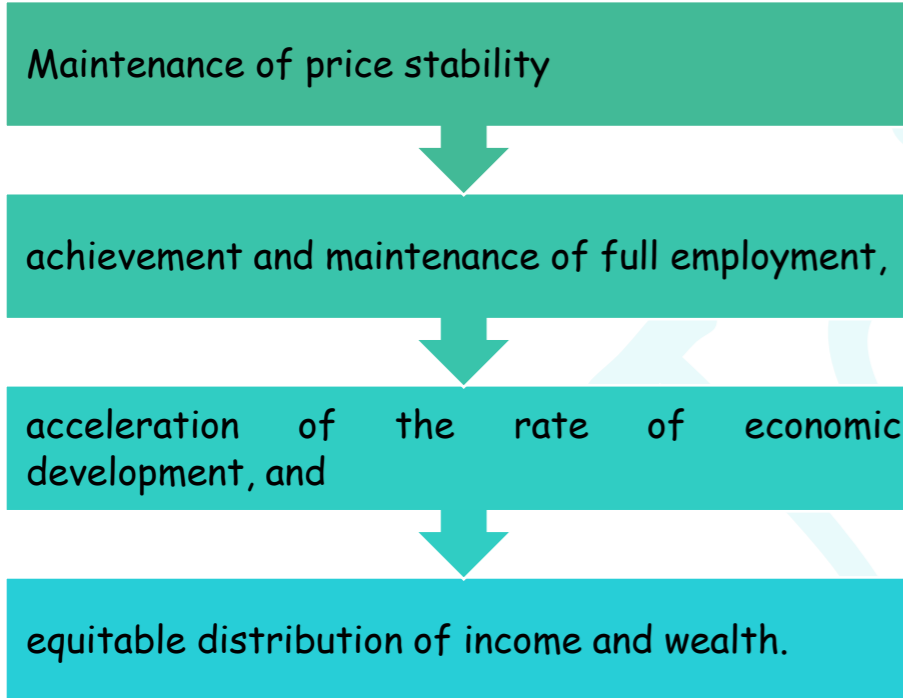
Guillotine

- Parliament's limited time allows for limited expenditure demands examination. After discussion period, Lok Sabha speaker puts outstanding grants demands to vote, known as 'Guillotine'.
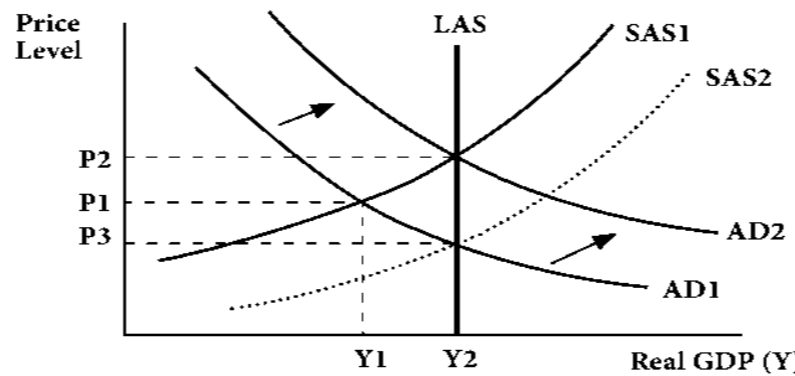
Unit - 4: Fiscal Policy

Meaning

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

•The significance of fiscal policy _as a strategy for achieving certain socio-economic objectives_ was not recognised or widely acknowledged before 1930 due to the faith in the limited role of government advocated by the then prevailing _laissez- faire approach_.

•Fiscal policy is in the _nature of a demand-side policy_

Objective of Fiscal Policy

Maintenance of price stability

achievement and maintenance of full employment,

acceleration of the rate of economic development, and

equitable distribution of income and wealth.

Types Of Fiscal Policy

Expansionary fiscal policy is designed to stimulate the economy during the _contractionary phase of a business cycle and is accomplished_ by increasing aggregate expenditures and aggregate demand through an increase in _all types of government spending and/or a decrease in taxes_.
An expansionary fiscal policy is used to address recession and the problem of general unemployment on account of business cycles.
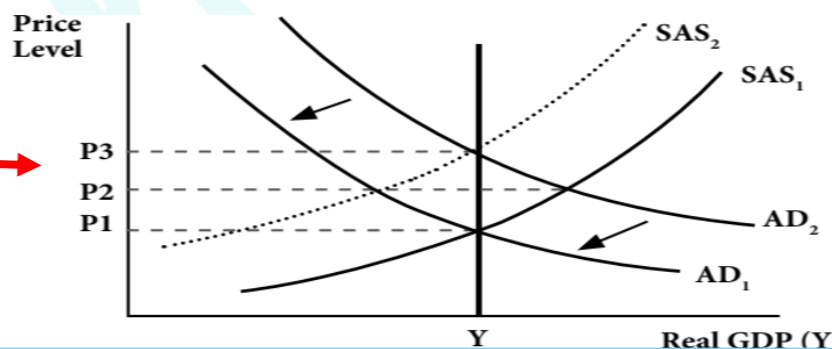
Contractionary fiscal policy is _designed to restrain the levels of economic activity of the economy_ during an inflationary phase by decreasing the aggregate expenditures and aggregate demand through a decrease in _all types of government spending and/ or an increase in taxes_.
Discretionary fiscal policy involves the government's deliberate actions to alter expenditure and taxes to influence national output, employment, and prices.

Instruments of Fiscal Policy

1. Government Expenditure

►Public expenditures generate income through various government activities like capital expenditure on public works, relief expenditures, subsidy payments, transfer payments, and social security benefits.
►Government Expenditure includes:

current expenditures to meet the day to day running of the government,

Capital expenditures refer to government investments in capital equipment and infrastructure.

Transfer payments, government spending, do not contribute to GDP as they transfer income between groups without direct contribution from receivers.

Pump priming

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

2. Taxes

▶Tax is a fiscal policy tool that involves adjustments in government revenues or tax rates to stimulate or limit private consumption and investment expenditures.

recession & depression
- Low corporate taxes boost business profits and investment, with tax reduction or government spending needed based on recessionary gap size and multiplier magnitude.

Inflation
- New taxes can be levied and the rates of existing taxes are raised to reduce disposable incomes and to wipe off the surplus purchasing power.
- However, excessive taxation usually decrease new investments and therefore the government has to be cautious about a policy of tax increase.

3. Public Debt

Internal and External debt

When the government borrows from its own people in the country, it is called internal debt.

When the government borrows from outside sources, the debt is called external debt.

Market loan and Small saving

market loan, the government issues treasury bills and government securities of varying denominations and duration which are traded in debt markets.

The small savings represent public borrowings, which are not negotiable and are not bought and sold in the debt market e.g., NSC, NDC etc.

recession & depression
- Repayment of loan - Supply of money increase in market - Demand increase - Production increase - Industrial growth increase

Inflation
- Borrowing - Supply of money decrease - demand decrease - Price level decrease

4. Budget

▶The budget is simply a statement of revenues earned from taxes and other sources and expenditures made by a nation's government in a year.

▶A government's budget can either be balanced, surplus or deficit

Surplus budget
- the government collects more than what it spends. It reduces demand and
- control inflation. It decreases nation's debt. But it reduce indus

Deficit budget
- the government expenditure in a year is greater than the tax revenue it collects. It increases demand, output, employment and industrial growth. But it increase nation's debt.

Balanced budget
- When expenditures in a year equal its revenues for that yea. No effect on demand.

Fiscal Policy for Long Run Economic Growth

- Fiscal policies supporting infrastructure spending, public goods like education, research, and development, and well-designed tax policies that reward innovation and entrepreneurship promote long-term economic growth.

Fiscal Policy for Reduction in Inequalities of Income and Wealth

- Income tax differentiation. High tax on rich people and low tax on poor people

- Indirect taxes differentiation. High tax on luxuries goods and low tax on goods which is largely used by low-income group.

- Government spending on welfare programme for poor people such as:
(a) Poverty alleviation programmes
(b) Infrastructure provision on a selective basis

Fiscal Policy Limitations

♦ In respect of choice of appropriate policy

♦ Recognition lag

♦ Decision lag

♦ Implementation lag

♦ Impact lag

♦ inappropriate timing,

♦difficulties of forecasting due to uncertainties,

♦ possible conflicts between different objectives,

♦ possibility of generating disincentives,

♦ practical difficulty to reduce government expenditures and the possibility of certain fiscal measures replacing private spending.

Fiscal Policy Limitations

♦ When spending of government increase during recession, sometimes it decreases private spending which is known as Crowding Out.

♦An increase in the size of government spending during recessions will 'crowd-out' private spending in an economy. In other words, when spending by government in an economy replaces private spending, the latter is said to be crowded out.

♦As a result of crowding out, the effectiveness of expansionary fiscal policy in stimulating aggregate demand will be diminished to a great extent. This may also possibly reduce the economy's prospects of long-run economic growth.

♦During deep recessions, crowding-out is less likely to happen as private sector investment is already minimal and therefore there is only insignificant private spending

Unit – 1: The concept of Money Demand: Important Theories

Meaning of Money

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

Fiat Money

►Fiat money is used as _a medium of exchange_ because the government has, by law, made them "_legal tender_," which means, they serve, by law, as means of payment.

Functions of Money

Medium of Exchange   Basis of Credit

Value of Store

a unit or standard of deferred payment

common measure of value

Characteristics of Money

Acceptable	Relatively scarce,
• Durable or long-lasting	• Easily transported

Effortlessly recognizable.	Possessing uniformity;
• Difficult to counterfeit	• Divisible

Demand for Money

The demand for money is _derived demand and is a decision_ about how much of one's given stock of wealth should be held in the form of money rather than as other assets such as bonds.

Classical Approach

The Quantity Theory of Money (QTM)

♦ One of the oldest theories of Economics, was first propounded by _Irving Fisher_ of Yale University in his book '_The Purchasing Power of Money' published in 1911_.

♦ There is _strong relationship between money and price level and the quantity of money_ is the main determinant of the price level or the value of money.

MV = PT

• M = the total amount of money in circulation (on an average) in an economy
• V = transactions velocity of circulation
• P = average price level _(P= MV/T)_
• T = the total number of transactions.

MV + M'V' = PT

• Equation of Exachange to include demand (bank) depostits (M') and Velocity in the total supply of Money

The Cambridge approach

►In the early _1900s,_ Cambridge Economists _Alfred Marshall, A.C. Pigou, D.H. Robertson, and John Maynard Keynes_ (then associated with Cambridge) put forward a fundamentally different approach to quantity theory, known as cash balance approach.

Money increases utility in the following two ways

• ♦ Enabling the possibility of split-up of sale and purchase to two diffeent points of time rather than being simultaneous.
• ♦ Being a hedge against uncertainty.

M_d = k PY

• M_d = is the demand for money balances,
• Y = real national income.
• P= average price level of currently produced goods and services
• PY = nominal income
• k= = proportion of nominal income (PY) that people want to hold as cash balances

Keynesian Theory of Demand of Money

►Keynes' theory of demand for money is known as '*Liquidity Preference Theory*'. 'Liquidity preference', a term that was coined by John Maynard Keynes in his masterpiece '*The General Theory of Employment, Interest and Money*' *(1936),* denotes people's desire to hold money rather than securities or long-term interest-bearing investments.

People hold money (M) in cash for three motives

The transaction motive

• The transactions motive for holding cash relates to the need for cash for current transactions for personal and business exchange. The transaction demand for money is directly related to the level of income. It can be calculated as follows:

• **$Lr = kY$**

• Lr = Transaction demand for money

• k = ratio of earning which is kept for transaction purposes

• Y = earning

The precautionary motive

• Individuals as well as businesses keep a portion of their income to finance unanticipated expenditures. It depends on the size of income, prevailing economic as well as political conditions and personal characteristics of the individual etc.

Speculative motive

• The speculative motive reflects people's desire to hold cash in order to be equipped to exploit any attractive investment opportunity requiring cash expenditure.

• The speculative demand for money and interest are inversely related.
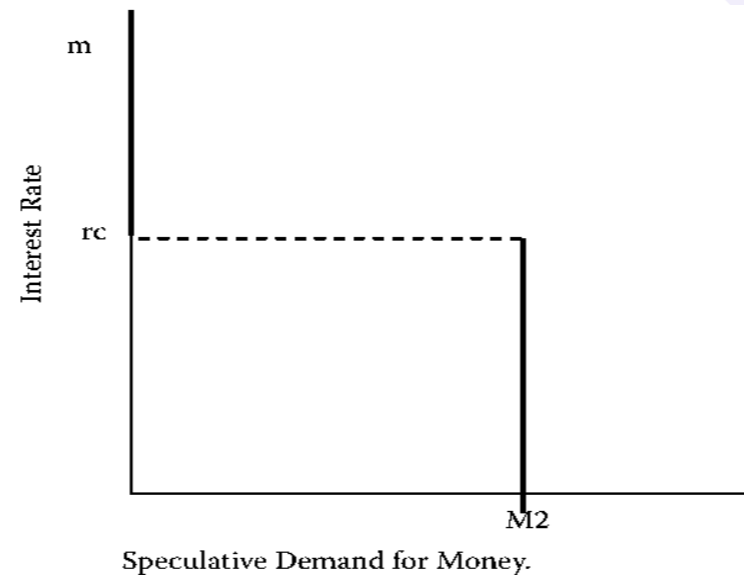
Individual's Speculative Demand for Money
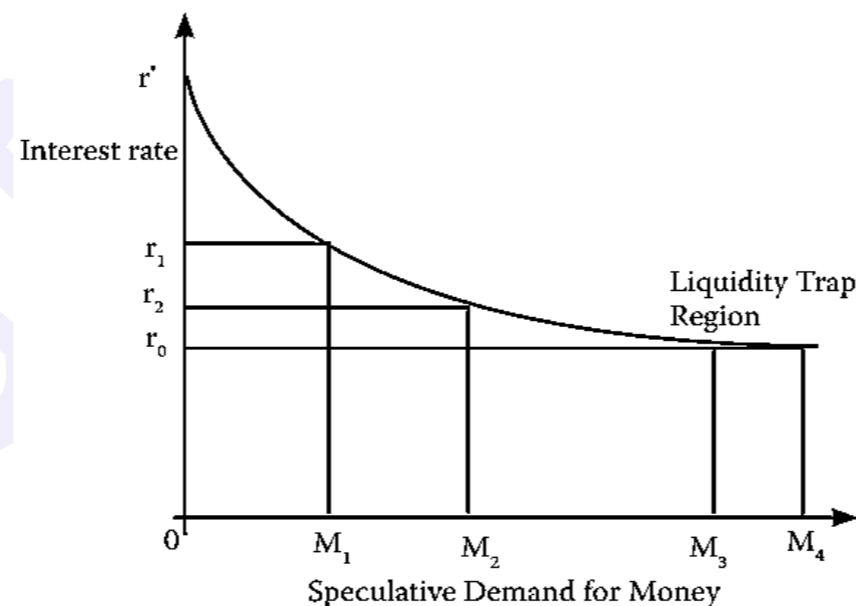
Aggregate Speculative Demand for Money

Liquidity trap

Liquidity trap is a situation where the desire to hold bonds is very low and approaches zero, and the demand to hold money in liquid form as an alternative approaches infinity.

People expect a rise in interest rate and the consequent fall in bond prices and the resulting capital loss.

The speculative demand becomes perfectly elastic with respect to interest rate and the speculative money demand curve becomes parallel to the X axis.

Post-Keynesian Development in the Theory of Demand for Money

►Inventory Approach to Transation Balances **(Baumol)**

►*Baumol (1952) and Tobin (1956)* developed a deterministic theory of transaction demand for *'real cash balance', known as Inventory Theoretic Approach,* in which money is essentially viewed as an inventory held for transaction purposes.

►People hold an optimum combination of bonds and cash balance, i.e., an amount that minimises the opportunity cost.

►The optimal average money holding is: a positive function of income Y, a positive function of the price level P, a positive function of transactions costs c, and a negative function of the nominal interest rate i.

Friedman's Restatement of the Quantity Theory

►*Milton Friedman (1956)* extending Keynes' speculative money demand within the framework of asset price theory holds that demand for money is affected by the same factors as demand for any other asset, namely, *permanent income and relative returns on assets*.

►The *nominal demand for money is positively* related to the price level, P; rises if bonds and stock returns, r and r, *respectively decline and vice versa*; is influenced by inflation; and is a function of total wealth

Demand for Money as Behaviour toward Risk

►The Demand for Money as Behaviour toward as *'aversion to risk'* propounded by *Tobin states that money is a safe asset but an investor* will be willing to exercise a trade-off and sacrifice to some extent the higher return from bonds for a reduction in risk.

►According to *Tobin*, rational behaviour induces individuals to hold an optimally structured wealth portfolio which is comprised of both bonds and money and the demand for money as a store of wealth, depends negatively on the interest rate.

Unit - 2: Concept of Money Supply

Meaning

► Money supply means _the stock of money_. It refers to the stock of money available to the public as a means of payment and store of value.
► Public includes household, firms and institutions _except Government and the banking system_. Demand deposit with bank is included in the _meaning of money supply_.

Rationale Of Measuring Money Supply

This tool aids in analyzing monetary developments to gain a comprehensive understanding of the factors driving money growth.

Supply of money is used for price stability. Supply of money is compared with standard and if there is deviation, it can be controlled.

Sources of Money Supply

The central banks of all countries are empowered to issue currency and therefore, the central bank is the primary source of money supply in all countries. In effect, high powered money is the source of all other forms of money.

The supply responses of the commercial banking system of the country to the changes in policy variables initiated by the central bank to influence the total money supply in the economy. In India, RBI is the Central Bank.

Measurement of Money Supply

►The measures of _money supply vary from country to country,_ from time to time and from purpose to purpose.
► Measurement of money supply is _essential as it enables a framework to evaluate_ whether the stock of money in the economy is consistent with the standards for price stability, to understand the nature of deviations from this standard and to study the causes of money growth.
►In India, RBI has been publishing data on four alternative measures of _money supply denoted by M1, M2, M3, M4_ besides the reserve money.
►**M1** = Currency and coins with the people + demand deposits of banks (Current and Saving accounts) + other deposits with the RBI.
M2 = M1 + savings deposits with post office savings banks.
M3 = M1 + net time deposits with the banking system.
M4 = M3 + total deposits with the Post Office Savings Organization (excluding National Savings Certificates).

Concept of Money Multiplier

M= m × MB

- M= money supply,
- m= money multiplier
- MB= monetary base or high-powered money.

Money Multiplier(m) = $\dfrac{\text{Money Supply}}{\text{Monetary Base}}$

Money Multiplier Approach to Supply of Money

► The money multiplier approach to money supply propounded by _Milton Friedman and Anna Schwartz, (1963)_ considers _three factors_ as immediate determinants of money supply
a) the stock of high-powered money **(H)**
b) the ratio of deposit to reserve, **e = {ER/D}** and
c) the ratio of deposit to currency, **c ={C/D}**

1. The behavior of the central bank

►Central bank change money supply by _two ways_:
(1) Supply of high-powered money (2) Reserve ratio
► The supply of nominal money in the economy will _directly vary with the supply of nominal high-powered money_ issued by the central bank if public and commercial bank behaviour remains unchanged.

2. The behavior of commercial bank

►The additional units of high-powered money that goes into 'excess reserves' of the commercial banks do not lead to any additional loans and therefore, these excess reserves do not lead to the creation of deposits.
►Higher excess reserve ratio **>** Low loan **>**Low money supply
►Lower excess reserve ratio **>** High loan **>** High money supply
►Excess reserve ratio depends on: (a) Interest rate (b) Expected deposit outflow

3. The behavior of public

M = C+D H = C+ reserves

- C=currency
- D=deposits/demand deposits.

▶The public, banks and the central bank by three variables namely, currency-deposit ratio c= C/D, reserve-ratio r= Reserves/D, and the stock of high-powered money (H)

Money Supply M = $\frac{1+C}{r+e+c}$ x H

- the currency ratio set by depositors c which depends on the behaviour of the public
- excess reserves ratio set by banks e, and
- the required reserve ratio set by the central bank r, which depends on prescribed CRR and the balances necessary to meet settlement obligations.

Monetary Policy & Money Supply

▶ The central bank of a country wants to stimulate economic activity it does so by infusing liquidity into the system.

$$\Delta Money\ supply = \frac{1}{R} \times \Delta Reserves$$

Is it possible that the value of money multiplier is zero?

- may happen when the interest rates are too low and the banks prefer to hold the newly injected reserves as excess reserves with no risk attached to it.

Effect of Government Expenditure on Money supply

▶When the Reserve Bank lends to the governments under WMA /OD it results in the generation of excess reserves (i.e. excess balances of commercial banks with the Reserve Bank).

Credit Multiplier

▶The Credit Multiplier also referred to as the deposit multiplier or the deposit expansion multiplier, describes the amount of additional money created by commercial bank through the process of lending the available money it has in excess of the central bank's reserve requirements.

▶ **Credit Multiplier= 1/Required Reserve Ratio**

New Monetary Aggregates

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

Reserve money

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

▶**Reserve Money** = Currency in circulation + Bankers' deposits with the RBI + Other deposits with the RBI
= Net RBI credit to the Government + RBI credit to the Commercial sector + RBI's Claims on banks + RBI's net foreign assets + Government's Currency liabilities to the public - RBI's net non-monetary Liabilities

NM1 = Currency with the public + Demand deposits with the banking system + 'Other' deposits with the RBI.

NM2= NM1 + Short-term time deposits of residents (Including and up to contractual maturity of one year).

NM3 = NM2 + Long-term time deposits of residents + Call/Term funding from financial institutions

Liquidity aggregates

▶**L1** = NM3 + All deposits with the post office savings banks (excluding National Savings Certificates).

▶**L2** = L1 +Term deposits with term lending institutions and refinancing institutions (FIs) + Term borrowing by FIs + Certificates of deposit issued by FI's.

▶**L3** = L2+ Public deposits of non-banking financial companies

Unit – 3: Monetary Policy

Meaning

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

Objectives Of Monetary Policy

Stability in price or controlling inflation

• Full employment

Regulate the issue of bank notes

• Ensure adequate flow of credit to the productive sector

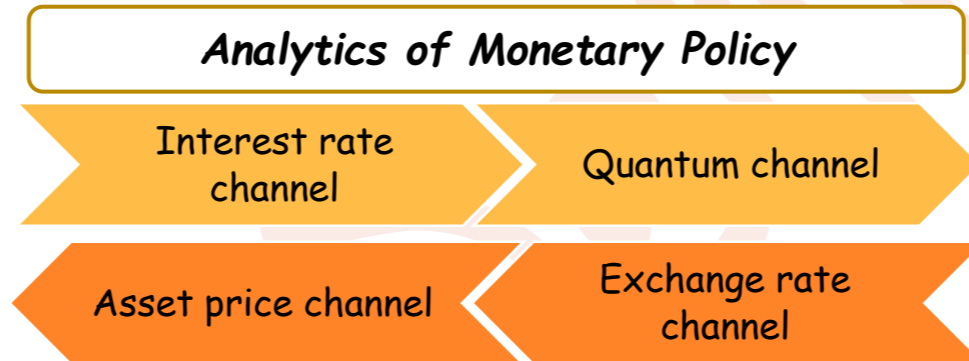Maintenance of a judicious balance between price stability and economic growth.

• Debt management

Moderate long term interest rate

• External balance of payments equilibrium

Monetary Transmission Mechanism

The process or channels through which the evolution of monetary aggregates affects the level of production and price level is *known as 'monetary transmission mechanism*' i.e how they impact real variables such as aggregate output and employment.

Analytics of Monetary Policy

Interest rate channel → Quantum channel

Asset price channel ← Exchange rate channel

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

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

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

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

Operating Procedure & Instruments

1. Quantitative tools

Cash Reserve Ratio

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

| High CRR | ⇒ | Low liquidity |

| High liquidity | ⇐ | Lower CRR |

Statutory Liquidity Ratio (SLR)

• is what the scheduled commercial banks in India are required to maintain as a stipulated percentage of their total Demand and Time Liabilities (DTL) / Net DTL (NDTL) in Cash, Gold or approved investments in securities.

Rise in the SLR which is resorted to during periods of high liquidity, tends to lock up

• a rising fraction of a bank's assets in the form of eligible instruments, and this reduces the credit creation capacity of banks.

Reduction in the SLR during periods of economic downturn

- the opposite effect. The SLR requirement also facilitates a captive market for government securities.

Statutory Liquidity Ratio

- Cash
- Gold
- Investment
  - Treasury bills of the Government of India
  - Dated Securities
  - State Government Loans
  - Other insturments as notified by RBI
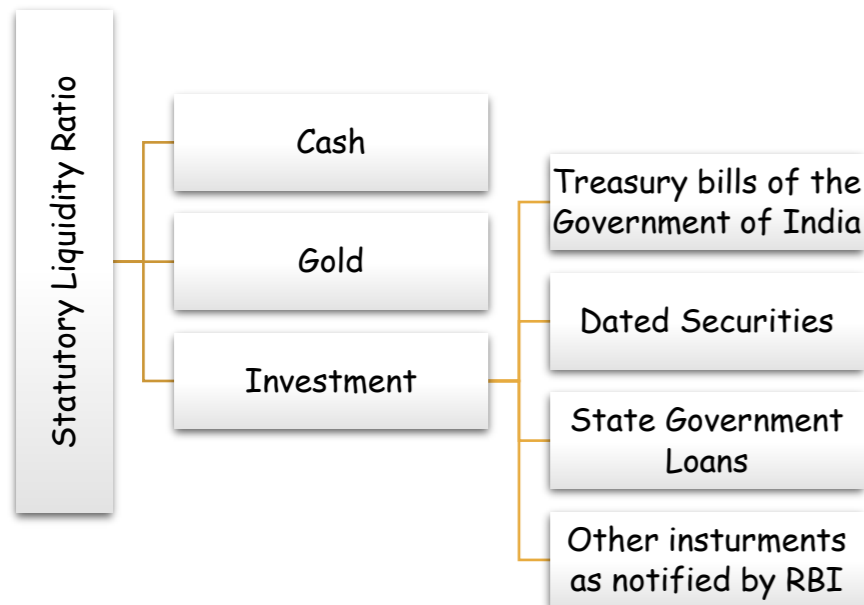
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Open Market Operations (OMO)

- OMOs is a general term used for market operations conducted by the Reserve Bank of India by way of sale/ purchase of Government securities to/ from the market with an objective to adjust the rupee liquidity conditions in the market on a regular basis.

2. Qualitative tools

Margin requirements

- RBI sets a margin against collateral, which influences customer borrowing habits. Raising these margin requirements reduces borrowing capacity.

Moral suasion

- By way of persuasion, the RBI convinces banks to keep money in government securities, rather than certain sectors.

Selective credit control

- Controlling credit by not lending to selective industries or speculative businesses.

3. Market Stabilisation Scheme (MSS)

The _Government of India borrows from the RBI_ (such borrowing being additional to its normal borrowing requirements) _and issues treasury bills/dated securities._

Bank Rate

- "the standard rate at which the Reserve Bank is prepared to buy or re-discount bills of exchange or other commercial paper eligible for purchase under the Act.

3. Liquidity Adjustment Facility (LAF)

Repo rate

- the rate at which banks borrow from RBI on a short-term basis against a repurchase agreement. Banks are required to provide government securities as collateral and later buy them back after a pre-defined time.

Reverse Repo rate

- The reverse of repo rate, i.e., this is the rate RBI pays to banks in order to keep additional funds in RBI.
- _Reverse Repo Rate = Repo Rate - 1_

5. Marginal Standing Facility (MSF)

- The penal rate at which the Central Bank lends money to banks, over the rate available under the rep policy. Banks availing MSF Rate can use a maximum of 1% of SLR securities.

  MSF Rate = Repo Rate + 1 MSF Rate = Repo Rate + 1

Monetary Policy Committee

♦ The Monetary Policy Committee (MPC) consisting of _six members_ shall determine the policy rate to achieve _the inflation target through debate and majority vote by a panel of experts_.

♦ The Monetary Policy Framework Agreement is an agreement reached _between the Government of India and the Reserve Bank of India (RBI)_ on the maximum tolerable _inflation rate as 4 per cent Consumer Price Index (CPI) inflation with a deviation of 2 percent_.

♦ Choice of a monetary policy action is rather complicated in view of the surrounding uncertainties and the need for exercising complex judgment to balance growth and inflation concerns. Additional complexities arise in the case of an emerging market like India.

Unit - 1: Theories Of International Trade

Meaning

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

Important Theories of International Trade

A powerful stimulus to economic efficiency and contributes to economic growth and rising incomes.

Efficient deployment of productive resources to their best use is a direct economic advantage of foreign trade.

Trade provides access to new markets and new materials and enables sourcing of inputs and components internationally at competitive prices.

Trade also provides greater stimulus to innovative services in banking, insurance, logistics, consultancy services etc.

Emerging economies can enhance product value and move up the global value chain by improving output quality, superior products, finer labor, and environmental standards.

Trade strengthens bonds between nations by bringing citizens of different countries together in mutually beneficial exchanges

Arguments against International Trade

♦ Negative labour market outcomes
♦ Economic exploitation
♦ Exhaustion of Natural Resources
♦ May result in consumerism
♦ Dependence
♦ May result in Inflation
♦ Disregard for welfare of people
♦ Quick transmission of trade cycles
♦ Rivalries and risks in trade associated with changes in governments' policies of participating countries

Important Theories of International Trade

Mercantilists View of International Trade

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

Theory of Absolute Advantage: Adam Smith

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

Factor-Price Equalisation Theorem

• that international trade equalises the factor prices between the trading nations. Therefore, with free trade, wages and returns on capital will converge across the countries.

Theory of Comparative Advantage : Ricardo

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

Heckscher-Ohlin Theory of Trade

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

New Trade Theory

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

Unit - 2: The Instruments of Trade Policy

Meaning of Trade Policy

►Trade policy encompasses all instruments that governments may _use to promote or restrict imports and exports_.

►Trade policies are broadly classified into price-related measures such as _tariffs and non-price measures or non-tariff measures (NTMs)_.

Meaning of Tariff

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

Forms of Import Tariffs

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

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

Other Forms of Import Tariffs

Anti-dumping Duties
Dumping occurs when manufacturers sell goods in a foreign country below the sales prices in their domestic market or below their full average cost of the product. It hurts domestic producers

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

Effects of Tariff

Tariff barriers create obstacles to trade,

reduce the prospect of market access,

make imported goods more expensive,

increase government revenues.

protect domestic industries,

increase consumption of domestic goods,

Non-Tariff Measures

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

Category of Non-Tariff Measures

Technical Measures

1. Sanitary and Phytosanitary (SPS) measures

are applied to protect human, animal or plant life from risks arising from additives, pests, contaminants, toxins or disease-causing organisms and to protect biodiversity.

2. Technical Barriers to Trade

cover both food and non-food traded products refer to mandatory 'Standards and Technical Regulations' that define the specific characteristics that a product should have, such as its size, shape, design, labelling / marking / packaging, functionality or performance and production methods, excluding measures covered by the SPS Agreement.

Non- Technical Measures

Imported quota

- direct restrictions on the physical amount of goods allowed into a country for a specific period, usually one year, enforced by licenses.

Price Control Measures

- Additional taxes and charges are measures used to control or influence the prices of imported goods, supporting domestic prices when these prices are lower.

Non-automatic Licensing & Prohibition

- Measures typically aim to restrict the importation of goods from various sources or a single supplier.

Financial Measures

- The regulation of foreign exchange access and payment terms for imports, including advance payment requirements and controls, can increase import costs.

Measures Affecting Competition

- Economic privileges are granted to a select group of economic operators, often through government-imposed channels or compulsory use of national services.

Trade-Related Investment Measures

- The regulations stipulate that a specific percentage of a final product should be produced domestically.

Restriction on Post-sales Services

- Producers may be limited from offering after sales services for exported goods in the importing country, with these services being reserved for local service companies.

Safeguard Measures

- Countries temporarily restrict imports of a product if their domestic industry is severely impacted or threatened by a surge in imports.

Embargos

- a total ban imposes by government on import or export of some or all commodities to particular country or regions for a specified or indefinite period.

Export Related Measures

Ban of Export

- Exports of certain items may be banned during shortages.

Export Taxes

- An export tax is a tax collected on exported goods and may be either specific or ad valorem and an export subsidy includes financial contribution to domestic producers in the form of grants, loans, equity infusions also usually provide etc., or give some form of income or price support. Both distort trade.

Export subsidies and Incentives

- Given by government to boost exports.

Voluntary Export-Restraints

- Voluntary Export Restraints (VERs) refer to a type of informal quota administered by an exporting country voluntarily restraining the quantity of goods that can be exported out of a country during a specified period of time, imposed based on negotiations to appease the importing country and to avoid the effects of possible trade restraints.
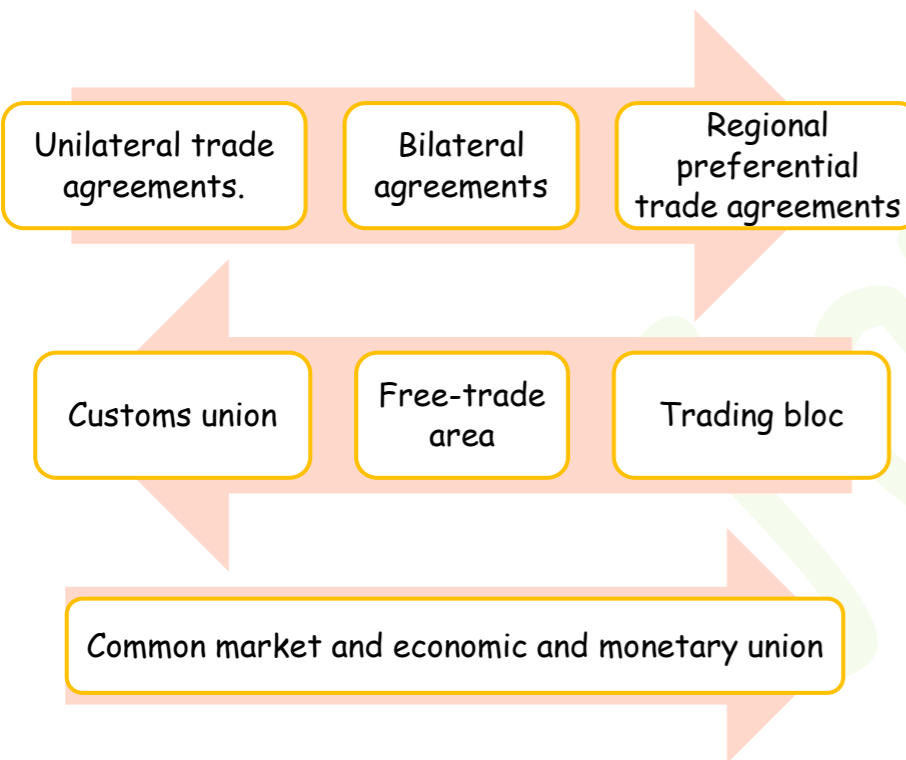
Meaning

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

Taxonomy Of Regional Trade Agreements (RTAs)

► As groupings of countries *(not necessarily belonging to the same geographical region)* which are formed with the objective of reducing barriers to trade between member countries.

Different types of agreements

Unilateral trade agreements.	Bilateral agreements	Regional preferential trade agreements

Customs union	Free-trade area	Trading bloc

Common market and economic and monetary union

Unit – 3: Trade Negotiations

General Agreement on Tariffs & Trade (GATT)

► The General Agreement on Tariffs and Trade (GATT) provided the rules for most of the world trade for *47 years, from 1948 to 1994*.

► *Eight multilateral negotiations known as "trade rounds"* held under the auspices GATT resulted in substantial international trade liberalization.

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

World Trade Organization (WTO)

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

Principal objective of the WTO

►Facilitate the flow of international trade smoothly, freely, fairly and predictably.

WTO Functions

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

WTO Activities

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

WTO Members

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

Important Agreements under WTO

♦ Agriculture

♦ SPS measures

♦ Textiles and clothing

♦ Technical barriers to trade (TBT)

♦ Trade-related investment measures (TRIMs)

♦ Anti-dumping

♦ Customs valuation

♦ Pre-shipment inspection (PSI)

♦ Rules of origin

♦ Import licensing procedures

♦ Subsidies and countervailing measures

♦ Safeguards, Trade in Services (GATS)

♦ Intellectual Property Rights (TRIPS)

♦ Settlement of Disputes (DSU)

♦ Trade Policy Review Mechanism (TPRM)

♦ Plurilateral trade agreements on trade in civil aircraft and government procurement.

A Few concerns of WTO

♦ Slow progress of multilateral negotiations

♦ Uncertainties resulting from regional trade agreements

♦ Inadequate or negligible trade liberalisation

♦ Those which are specific concerns to the developing countries

♦ Protectionism and lack of willingness among developed countries to provide market access

♦ Difficulties that they face in implementing the present agreements

♦ Apparent north-south divide

♦ Exceptionally high tariffs

♦ Tariff escalation, erosion of preferences and difficulties with regard to adjustments.

Doha Round, formally the Doha Development Agenda

♦ The ninth round since the Second World War was officially launched at the WTO's Fourth Ministerial Conference in Doha, Qatar, in November 2001.

♦ Sought to accomplish major modifications of the international trading system through lower trade barriers and revised trade rules

♦ Include 20 areas of trade.

Unit - 4: Exchange Rate and its Economic Effects

Exchange Rate Meaning

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

Exchange Rate Regime

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

Floating Exchange Rate Regime

The equilibrium value of the exchange rate of a country's currency is market determined i.e the demand for and supply of currency relative to other currencies determines the exchange rate.

A floating exchange rate allows a government to pursue its own independent monetary policy and there is no need of market intervention or maintenance of reserves. But, volatile exchange rates generate a lot of uncertainties in relation to international transactions.

Fixed Exchange Rate or Pegged exchange rate

►Under fixed exchange rate system country's government and central bank decides the rate and direction of currencies.

►Exchange rate is generally determined by the market force. _Time being it is called soft peg_.

►Central bank sets fixed on unchanging value of exchange it is _called hard peg_.

►A fixed exchange rate avoids currency fluctuations and eliminates exchange rate risks.

►System imposes discipline on country's monetary authorities and therefore likely to generate lower-level inflation.

►Fixed exchange rate system encourages greater trade and investment and also ensures stabilities.

►Fixed exchange rate system countries have to maintain adequate amount of foreign exchange reserves.

Nominal Vs Real Exchange Rate

▪ **Real Exchange Rate:** The 'real exchange rate' incorporates changes in prices and describes 'how many' of a good or service in one country can be traded for 'one' of that good or service in a foreign country.
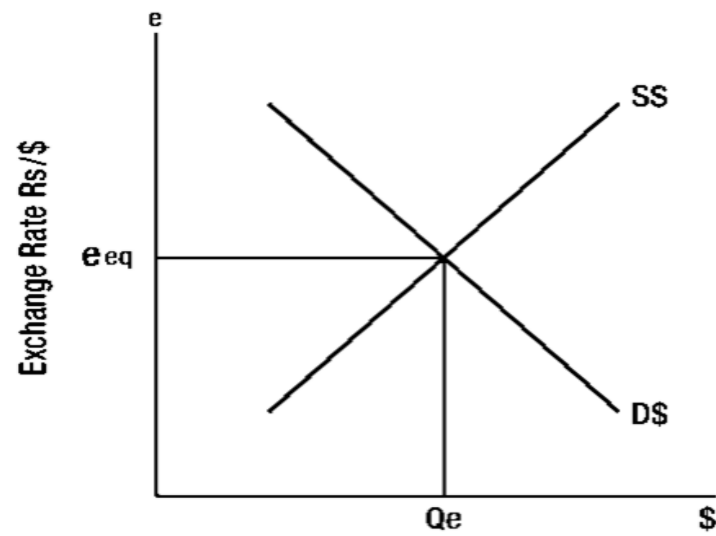
▪ _Real exchange rate=_
Nominal exchange rate $\times \dfrac{Domestic\ price\ Index}{Foreign\ price\ Index}$

▪ Nominal Exchange Rate states how much of one currency can be traded for a unit of another currency.

Real Effective Exchange Rate (REER)

▪ The nominal effective exchange rate (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.

▪ An increase in REER implies that exports become more expensive and imports become cheaper; therefore, an increase in REER indicates a loss in trade competitiveness.

Determination of Nominal Exchange Rate

Changes in Exchange Rate

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

▪ The equilibrium rate of exchange is determined by the interaction of the supply and demand for a particular foreign currency.

Changes in Exchange Rates

♦ Portray depreciation or appreciation of one currency.

♦ The terms, `currency appreciation' and 'currency depreciation' describe the movements of the exchange rate.

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

Home-currency depreciation
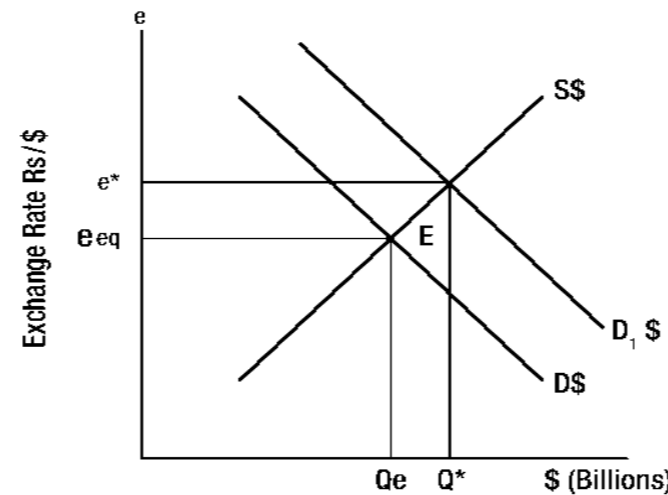
Foreign-currency appreciation occurs when the home currency's foreign currency price increases or decreases, making the home currency less valuable.

Home-currency appreciation
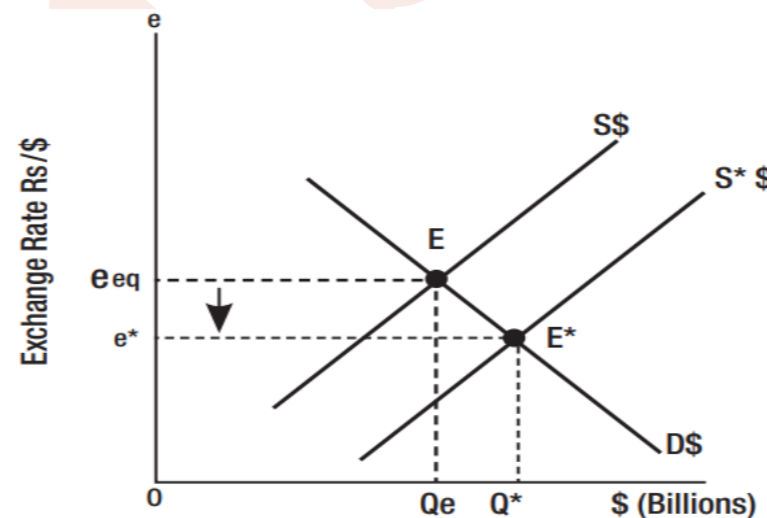
Depreciation occurs when the home currency's value decreases or increases with the foreign currency's price, making the home currency more valuable.

Devaluation (Revaluation) Vs Depreciation (Appreciation)

Devaluation

• is a deliberate downward adjustment by central bank in the value of a country's currency relative to another currency, group of currencies or standard.

Appreciation

• A country's currency cause changes in import and export prices will lead to changes in import and export volumes, causing resulting in import spending and export earnings.

Effect of Depreciation

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

Effect of Appreciation

▪ Currency appreciation raises the price of exports, decrease exports; increase imports, adversely affect the competitiveness of domestic industry, cause larger deficits and worsens the trade balance.

Foreign Exchange Market

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

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

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

Types of transactions in a Forex market

Spot Market

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

Forward and /or Future Market

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

Unit – 5: International Capital Movements

Meaning

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

Important components

Foreign aid or assistance

Borrowings

Deposits from non-resident Indians (NRI)

Investments

Foreign portfolio investment (FPI) → Foreign direct investment (FDI)
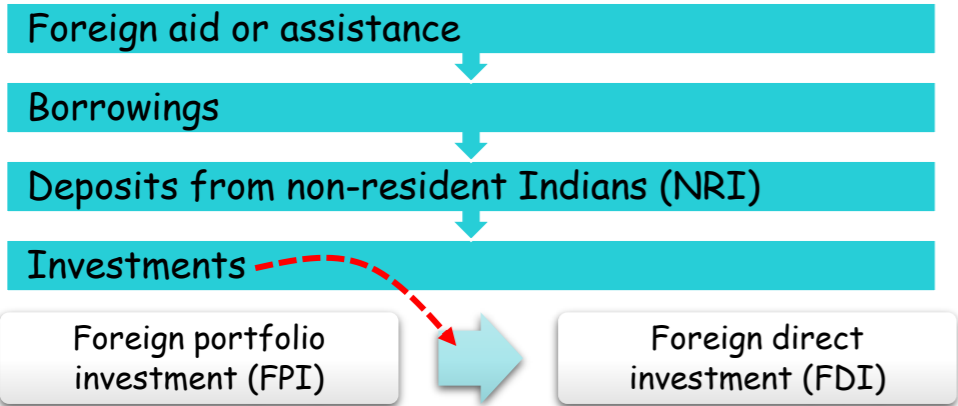
Foreign Direct Investment

- a process whereby the resident of one country (i.e. home country) acquires ownership of an asset in another country (i.e. the host country) and such movement of capital involves ownership, control as well as management of the asset in the host country.
- Direct investments are real investments in factories, assets, land, inventories etc. and have three components, viz., equity capital, reinvested earnings and other direct capital in the form of intra-company loans. FDI may be categorized as horizontal, vertical or conglomerate. Two- way direct foreign investments reciprocal investments.

Reasons For Foreign Direct Investment

♦ Profits

♦ Higher rate of return

♦ Possible economies of large-scale operation

♦ Risk diversification

♦ Retention of trade patents

♦ Capture of emerging markets

♦ Lower host country environmental and labour standards,

♦ Bypassing of non-tariff and tariff barriers

♦ Cost–effective availability of needed inputs and tax and investment incentives.

Modes of FDI

· Opening of a subsidiary or associate company in a foreign country

· Equity injection into an overseas company

·Acquiring a controlling interest in an existing foreign company

· Mergers and acquisitions (M&A)

· Joint venture with a foreign company

· Green field investment

· Brownfield investments

Green field investment

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

Brownfield investments

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

Benefits of foreign direct investment

♦ Include positive outcomes of competition such as cost reducing and quality-improving innovations

♦ Higher efficiency

♦ Huge variety of better products and services at lower prices

♦ Welfare for consumers, multiplier effects on employment

♦ Output and income, relatively higher wages

♦ Better access to foreign markets

♦ Control of domestic monopolies and betterment of balance of payments position

♦ Potential problems of foreign direct investment

♦ Include use of inappropriate capital- intensive methods in a labour-abundant country

♦ Increase in regional disparity

♦ Crowding-out of domestic investments

♦ Diversion of capital resulting in distorted pattern of production and investment

♦ Instability in the balance of payments and exchange rate and indiscriminate repatriation of the profits.

♦ Anti-ethical market distortions

♦ Off–shoring or shifting of jobs

♦ Overexploitation of natural resources causing environmental damage

♦ Exercising monopoly power

♦ Decrease competitiveness of domestic companies

♦ Potentially jeopardize national security and sovereignty

♦ Worsen commodity terms of trade and cause emergence of a dual economy

Foreign portfolio investment

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

Foreign portfolio investment Vs Foreign Direct Investment

FDI	FPI
Investment involves creation of physical assets	Investment is only in financial assets
Has a long-term interest and therefore remains invested for long	Only short-term interest and generally remain invested for short periods
Relatively difficult to withdraw	Relatively easy to withdraw
Not inclined to be speculative	Speculative in nature
Often accompanied by technology transfer	Not accompanied by technology transfer
Direct impact on employment of labour and wages	No direct impact on employment of labour and wages
Enduring interest in management and control	No abiding interest in management and control
Securities are held with significant degree of influence by the investor on the management of the enterprise	Securities are held purely as a financial investment and no significant degree of influence on the management of the enterprise

FDI in India

Mostly a post reform phenomenon is a major source of non- debt financial resource for economic development.

The government has at different stages, liberalized FDI by increasing sectoral caps, bringing in more activities under automatic route and easing of conditions for foreign investment.

Overseas direct investments by Indian companies, made possible by progressive relaxation of capital controls and simplification of procedures for outbound investments from India, have undergone substantial changes in terms of size, geographical spread and sectoral composition. Outward Foreign Direct Investment (OFDI) from India stood at US$ 1.86 billion in the month of June 2016.

Status Of Indian Economy: Pre Independence-Period (1850 -1947)

►India is believed to have had the *largest economy of the ancient and the medieval world* and controlled between one third and one fourth of the world's wealth. It was prosperous and self-reliant and had flourishing cities and self-sufficient villages.

►The advent of the *Europeans and the rule of British from 1757 to 1947* brought about a marked shift in the economic history of India.

►The industrial revolution in Britain led to increased production, targeting India for raw materials and markets, but adverse imperial policies and easy importation reduced Indian manufacturing competitiveness and domestic demand.

►Rapid industrialization of the economy was the cornerstone of Nehru's development strategy. The concept of 'planned modernization' meant a systematic planning to support industrialization.

Indian Economy: Post-Independence (1947- 1991)

Industrial Policy Resolution (1948)
envisaged an expanded role for the public sector and licensing to the private sector.

Policies in 1950's
were guided by both Nehruvian and Gandhian philosophies with the former visualizing a socialistic society with emphasis on heavy industries and the latter stressing on small scale and cottage industry and village republics.

Industrial Policy Resolution of 1956
supported undue priority and enormous expansion of the scope of the public sector which resulted in dampening of private initiative and enterprise.

In the first *three decades after independence (1950-80),* India's average annual rate of growth of GDP, often referred to as the *'Hindu growth rate'*, was a modest *3.5 percent*.

The *first major shift in Indian economic strategy was in the mid-1960s*. Due to continuous failures of monsoon, droughts struck India in 1966 and 1967 and food crisis set in. The need for increased productivity in agriculture kick-started a strategic change in agriculture policies.

'Green Revolution'

• This radical change materialised by innovative farm technologies, including high yielding seed varieties and intensive use of water, fertilizer and pesticides is referred to as 'Green Revolution'.

►Many government policies aimed at prevention of growth of monopolies and equitable distribution of income and wealth such as reservation of many products for exclusive manufacture by the small-scale sector and the Monopolies and Restrictive Trade Practices Act, 1969 (MRTP) (which placed several restrictions on large enterprises in terms of licensing, capacity addition, mergers and acquisitions) effectively killed the incentive for creating wealth.

►The economic performance during the period of 1965-81 is the worst in independent India's history. The *license-raj*, the autarchic policies that dominated the 1960s and 1970s, and the external shocks such as three wars, major droughts, and the oil shocks of 1973 and 1979 contributed to the decelerated growth lasting two decades.

The Era Of Reforms

►The reform initiatives- covering three areas, namely industry, trade and taxation spanning 1981 to 1989, is referred to as 'early liberalization' or 'reforms by stealth' to denote its ad hoc and not widely publicized nature. They were aimed at changing the prevailing thrust on 'inward-oriented' trade and investment practices.

►The major reforms in 1980's included de licensing of 25 broad categories of industries, granting of the facility of 'broad-banding' to allow flexibility and rapid changes in the product mix of industries without going in for fresh licensing, increase in the asset limit of MRTP firms from 20 crore to 100 crore, introduction of modified value-added (MODVAT), establishment of the Securities and Exchange Board of India (SEBI) as a non-statutory body ,extension of the Open General Licence (OGL), export incentives, liberalisation of imports, reduction in tariffs and removal of price and distribution controls on cement and aluminium.

Fiscal reforms

►The fiscal reforms included introduction of a stable and transparent tax structure, better tax compliance, control of government expenditure, reduction /abolition of subsidies, disinvestment of part of government's equity holdings and encouraging private sector participation.

Monetary reforms

The monetary and financial sector reforms were in the form of interest rate liberalization, reduction in controls on banks by the Reserve Bank of India in respect of interest rates and facilitating greater competition in the banking sector by private participation and foreign competition, reduction in reserve requirements, liberalisation of bank branch licensing policy and establishing prudential norms of accounting in respect of classification of assets, disclosure of income and provisions for bad debt.

Reforms in Capital Markets

Reforms in Capital Markets included granting of statutory recognition to the Securities and Exchange Board of India (SEBI) to facilitate mobilization of adequate resources and their efficient allocation.

'New Industrial Policy'

The 'New Industrial Policy' announced by the government on 24 July 1991 sought to substantially deregulate industry so as to promote growth of a more efficient and competitive industrial economy.

The policy put an end to the 'License Raj' by removing licensing restrictions for all industries except for 18 on strategic considerations.

Trade policy reforms

►The trade policy reforms included liberalisation of external trade, removal of licensing for imports, dismantling of quantitative restrictions on imports and exports and phased reduction and simplification of tariffs.

NITI Aayog

►On 1st January 2015, the apex policy-making body namely Planning Commission, was replaced by the National Institution for Transforming India (NITI) Aayog with the objective to 'spur innovative thinking by objective 'experts' and promote 'co-operative federalism' by enhancing the voice and influence of the states'.

►NITI Aayog is expected to serve as a 'Think Tank' of the government. [and] as 'directional and policy dynamo'. The key initiatives of NITI Aayog are: 'Life', The National Data and Analytics Platform (NDAP), Shoonya, E-Amrit, India Policy Insights (IPI), and 'Transforming India's Gold Market'.