

Economics → use of scarce resources to satisfy unlimited human wants.
↳ derived from "Οικονομία"

Microeconomics

- Study of economics at an individual level, group or company level.
- eg - Consumer shop, Small Business
- Affects individuals & companies
- Analyses partial behaviour of economy.
- Scope → less
- Classical Economists supported this Economics

Macroeconomics

- Study of national economy as a whole.
- eg - National Income, unemployment rate
- Issues that affect whole economy.
- Analyses the entire behaviour of economy
- Scope → more
- Modern Economists supports this Economics

Economics in Engineering:

1. Improves Efficiency & Productivity
2. Strategic Decision Making
3. Problem of choice confronted.
4. Cost-effective upgraded Technology
5. Forecasting fluctuations in Business Cycle.

Goods: commodity or service which gives satisfaction to humans on consumption.

→ free good: Supply > Demand eg - Air, sun rays
(Non-economic)

→ Economic good: Supply < Demand.
↳ Have an exchange value:
↳ Have a price

→ Capital Goods:

Help in production of other goods.

Eg: machine & raw materials

→ Consumer Goods

→ Directly consumed by Human.

Eg: Milk & Bread
↳ Perishable & Non-perishable
↳ Durable & Non-durable

↳ Veblens Goods: consumer goods violating law of demand
Demand ↑↑ with price ↑↑

↳ Transferrable vs Non-Transferrable

→ Complementary vs Substitute

→ Material vs Non-material

Normal Goods - Demand ↑↑ with ↑↑ in Income

↳ Price elasticity is negative

→ Inferior goods

↳ Demand ↓↓ with ↑ in Income

Substitution effect: more prominent

Price elasticity +ve

→ Public Good

→ Non-excludable

→ Non-rivalrous

↳ Giffen goods - Violates law of demand
Demand ↑↑ with ↑↑ in price
Income effect: more prominent
Price elasticity +ve

Private Good

→ Excludable

→ Rivalrous

Rivalrous Excludable

Private good: Food, House property

Non-rivalrous Club good: Library, Theater

Non-Excludable
common good: Timber, Mineral

Public good: Air, Road, Water,

→ Goods have utility for human beings

Utility : "Want satisfying capacity"

Goods - Pre consumption - Utility
Post consumption - Satisfaction

- Form utility - changing form of product to make it more serviceable.
- Place utility - Transporting good from a surplus place to a place where there is short supply.
- Time utility - Storing product when it is surplus for time when it will be needed & valued more.
- Possession utility - Transferring / changing ownership of good from a person with little use to other with more use.
- Service utility - Providing service to necessary clients.

Cardinal utility (Marshall)

Satisfaction derived from consumption of good can be expressed numerically

Quantitative
less
Utils

Staus

Meaning

Approach

Realistic

Measurement

Ordinal utility (Jevons)
Satisfaction; a consumer derives from good's consumption cannot be expressed numerically.

Qualitative

More

Rank

Marginal utility Analysis

classical & Neo-classical
Economists

Analysis

Indifference curve Analysis

Promoted By modern Economists

Marginal Utility - Added satisfaction a consumer gets from having one more unit of a good or service

$$\rightarrow MU = \frac{\Delta \text{total utility}}{\Delta \text{total quantity consumed}} = \frac{\Delta U}{\Delta Q}$$

$$\rightarrow MU = \frac{d(TU)}{dx}$$

TU: total utility

dx

x: no. of units consumed

→ Intensity of a utility of a good ↓↓ as he consumes successive units of product.

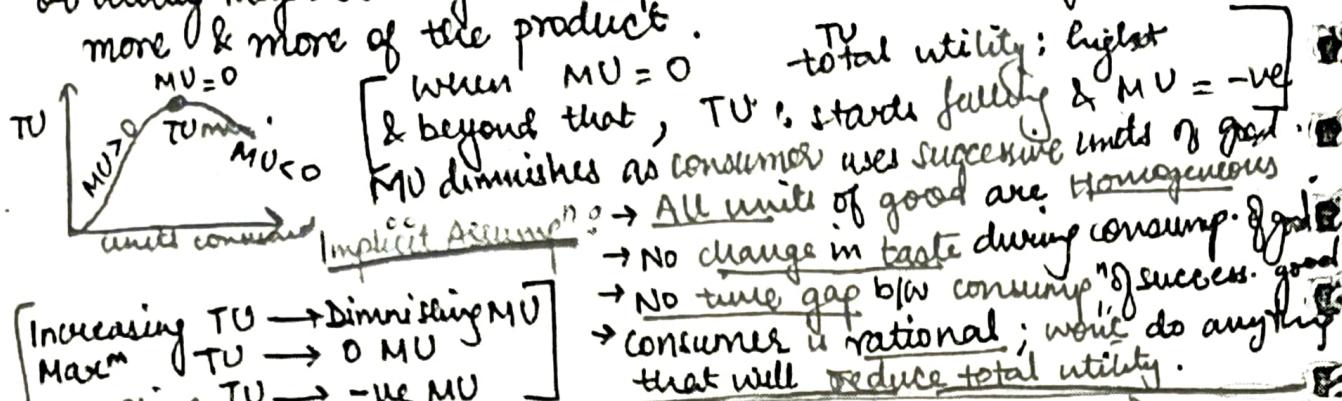
LAW OF UTILITY:

→ A rational consumer will like to consume the good whose intensity is more than the good whose intensity is less.

CARDINAL UTILITY Marginal Utility

→ A person consumes more units of good, the marginal utility with the successive units of consumed good ↓ while total utility ↑↑ at falling rate, if other things remains same.

→ As a person consumes an item or a product, the satisfaction or utility they derive from the product wanes as they consume more & more of the product.



Law of Equi-Marginal Utility (CONSUMERS-EQUILIBRIUM)

↳ Explains behaviour of a ~~per~~ consumer when he consumes more than one commodity.

→ It states "A consumer should spend his limited income on different commodities in such a way that the least rupee spent on each commodity yields him equal marginal utility in order to get maximum satisfaction."

Principle : Obtaining max^m satisfaction from limited income.

$$\frac{MU_L}{P_L} = \frac{MU_m}{P_m} = \frac{MU_n}{P_n}$$

→ A rational human spends his total income over a broad spectrum of goods & MU derived from last unit of each good is equal.

Assumption → Rational consumer

→ Cardinally measured utility

→ MU of money = constant

→ As more units consumed, utility from each additional unit falls

↳ CONDⁿ for consumer equilibrium

$$P_L Q_L + P_m Q_m + \dots = Y \text{ (Income)}$$

ORDINAL UTILITY :

Indifference Curve Analysis

↳ Locus of points which represents combⁿ of 2 commodities M & N which yield equal satisfaction to the consumer.

Characteristics : Is negatively sloped & convex to the origin.

↳ 2 indifference curves don't intersect & are usually parallel to each other

↳ Indifference curves towards x

→ P_i : Price of commodity

→ Q_i : Quantity "

→ I : Indifference Curve

→ O : Origin

→ A, B, C, D : Points on indifference curves

→ P₁, P₂, P₃, P₄, P₅, P₆ : Prices of commodity

→ Q₁, Q₂, Q₃, Q₄, Q₅, Q₆ : Quantities

→ I₁, I₂, I₃, I₄, I₅, I₆ : Indifference curves

→ X, Y : Commodity

→ G : Goods

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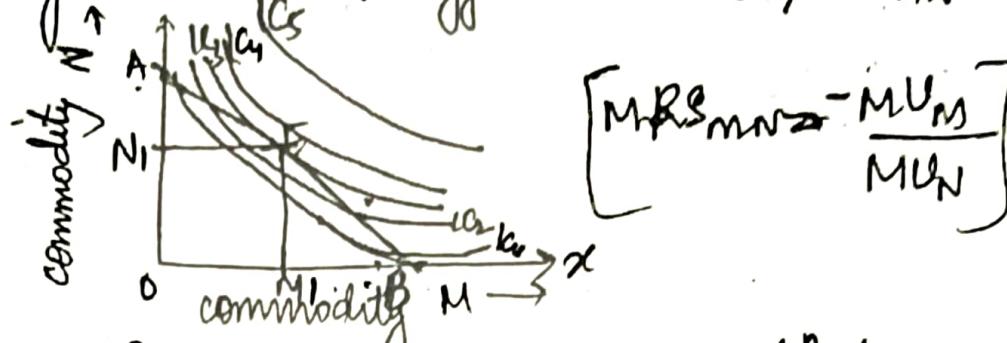
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- Marginal Rate of Substitution (MRS_{MN}): Refers to amount of N that a user is willing to forego in order to gain 1 additional unit of M (& still have same level of satisfaction)
- On moving down the indifference curves, MRS_{MN} diminishes



→ Budget constraint line - Shows different comb' of commodities consumer can purchase given his money, income & prices of commodity (AB is the Budget line)

→ Consumer eqb^M - when his budget line reaches highest possible curve. Consumer eqb^M is reached at E on IC₃ → $MRS_{MN} = \frac{P_M}{P_N}$ or it is falling

→ Price Effect - Impact of change in price of M on consumers demand & consumption, while keeping price of N, consumer's taste & money income constant.

→ Price Consumption Curve (PCC) - locus of point of consumer's equilibrium resulting when only price of M is varied.

→ Consumer Demand Curve - Amount of N a consumer would purchase at various prices of M.

→ Price Effect = Income Effect + Substitution Effect.

Application of Indifference Curve:

* To calculate price elasticity of demand for product which has numerous close substitutes

* To differentiate b/w → Goods & luxury

Wish become a WANT → Substitute & complementary good if it is supported by ability to fulfil it

• WANTS → NECESSITIES → Existence

→ COMFORTS → efficiency

→ LUXURY → Conventional

→ One will like to fulfill WANT with higher intensity of consumption first

→ One will like to have more of a good if price is less, ex. less if price is more.

All with supported by ABILITY & WILLINGNESS to fulfil it, becomes demand

LAW OF DEMAND

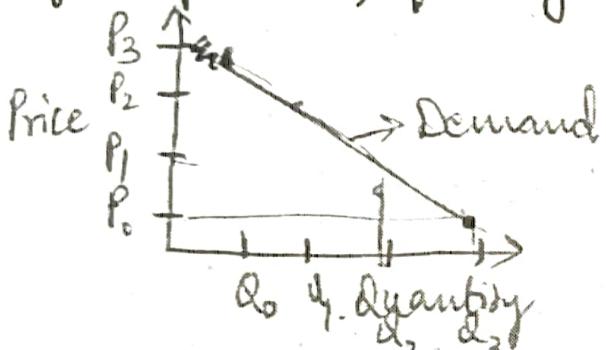
Demand - Amount of goods & services a consumer is willing and able to buy at various prices in a given period of time.

Latent demand - Demand/service that consumers can't satisfy due to
 1) Consumer doesn't have enough money
 2) Item is not available.
 3) Consumer doesn't know that service is available / not.

LAW OF DEMAND - Quantity & price relation

$$\frac{\text{Quantity demanded}}{\text{Price}} \propto \frac{1}{P}$$

As price of a product $\uparrow\uparrow$; quantity for that product $\downarrow\downarrow$
 If the price $\uparrow\uparrow$, quantity demanded \downarrow



→ Price \uparrow from P_2 to P_3 ; quantity \downarrow from Q_1 to Q_2

→ Price \downarrow from P_3 to P_2 ; quantity \uparrow from Q_2 to Q_1

Contraction / Expansion in Demand: Price is same
 But Demand $\downarrow\downarrow$ or $\uparrow\uparrow$ due to change in other factors

Exception to the Law of Demand

If Price $\uparrow\uparrow$; Demand $\uparrow\uparrow$; If price $\downarrow\downarrow$; Demand $\downarrow\downarrow$

① Giffen goods (Inferior goods in which)
 When price falls; demands also falls
 customer/consumer switch to super substitutes

② Velben Goods / Prestige / Conspicuous Consumption:

Some people measure commodity purely by its price.
 "Higher priced good/items have more profit value."

③ Ignorance & Illusion to Buyers/Customers:

④ Emergency → war, flood, earthquake

⑤ Necessities of life → salt, food, milk, petrol.

Price Expectation: If prices are expected to rise further,
 the initial demand $\uparrow\uparrow$.

Elasticity of demand, quantity of demand by virtue of changes (i.e. ↑ or ↓) when the price changes, is called elasticity of demand.

① PRICE elasticity of demand ③ CROSS elasticity of demand
 ② INCOME elasticity of demand

① PRICE elasticity of Demand : $\Delta \text{Demand} / \Delta \text{Price}$

$$= \% \text{ change in quantity demanded} = \frac{\% \Delta Q}{\% \Delta P}$$

price elasticity coefficient $\leftarrow e_d = \frac{\text{change in demand}}{\text{change in price}} = \frac{\frac{\Delta Q}{Q_0}}{\frac{\Delta P}{P_0}} \times \frac{P_0}{Q_0} = \frac{\Delta Q / Q_0}{\Delta P / P_0}$

$$0 \leq e_d < \infty$$

Factors affecting Price Elasticity :

- 1) Sustainability
- 2) Relative size of expenditure
- 3) Necessity v/s luxury
- 4) Time period

Application of Price Elasticity :

- 1) As guide for setting prices
- 2) As guide for shifting tax burden in case of Indirect Tax
- 3) Discount Sales

Measurement of Price of Elasticity :

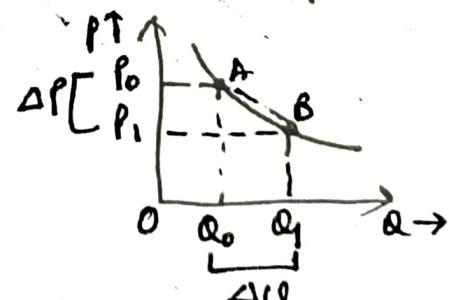
① Total outlay / Expenditure method

↳ Effect of change in price on change in total expenditure of commodity

Effect of increase in Price	Nature of change in expenditure	$ e_d $	Nature of e_d	Commodity	
				Increase	Decrease
	Increases	$ e_d > 1$	Elastic		
	Decreases	$ e_d < 1$	Inelastic		
	Constant	$ e_d = 1$	Unit Elastic		

② Arc method

Measure of average responsiveness of price change exhibited by demand curve over a finite stretch



$$\Delta P = P_1 - P_0$$

$$\Delta Q = Q_1 - Q_0$$

$$P = \frac{P_1 + P_0}{2}$$

$$(Q = \frac{Q_1 + Q_0}{2})$$

$$= - \frac{(Q_1 - Q_0)}{(P_1 - P_0)} \cdot \frac{(P_1 + P_0)/2}{(Q_1 + Q_0)/2} = - \frac{Q_1 - Q_0}{P_1 - P_0} \cdot \frac{P_1 + P_0}{Q_1 + Q_0}$$

$$e_d = - \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$e_d = - \left(\frac{Q_1 - Q_0}{Q_1 + Q_0} \right) \cdot \left(\frac{P_1 + P_0}{P_1 - P_0} \right)$$

③ Point Method - Pts. where $\frac{dQ}{dP} = \infty$ i.e. $dP=0$ or $dQ=0$
 shouldn't be taken into consideration



$$ed = -\frac{\Delta Q}{\Delta P} \cdot \frac{P}{Q}$$

#2 Income elasticity of demand

= % change in quantity demanded
 / % change in income

$ey < 0$: Inferior good
 $ey > 0$: Normal good

$ey < 1$: Necessity

$ey > 1$: Luxury elastic

$$ey = \frac{\Delta Q}{\Delta Y} \cdot \frac{Y}{Q}$$

$$\text{Income } = \frac{Q_{\text{new}} - Q_{\text{old}}}{Q_{\text{old}}} \times \frac{I_{\text{old}}}{I_{\text{new}}}$$

⇒ Ratio of proportionate change in demand with proportionate change in income (ey)

→ Goods with low ey : Recession Proof.

→ If $ey < 0$, then firm must expect decline in demand as economy grows.

→ ey info. is considered for planning location, expansion of firm

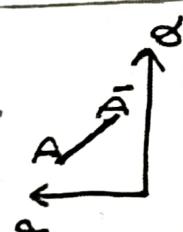
① Price elasticity of demand

Implication
change in
price doesn't affect
Demand.

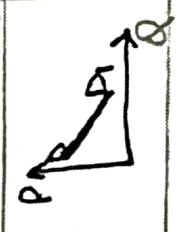
Decreasing
Type of elasticity
 $\frac{\Delta Q}{\Delta P} < 0$

$$ed = \frac{\Delta Q}{\Delta P}$$

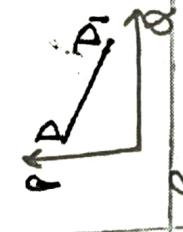
Perfectly
inelastic



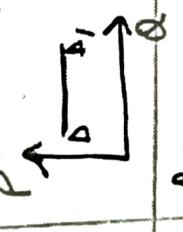
Less than
unit elastic



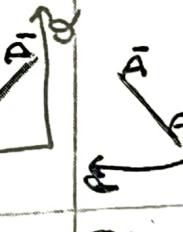
More than
unit elastic



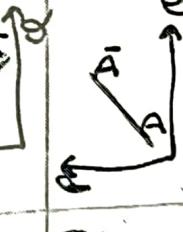
Perfectly
elastic



Normal good



-ve



+ve



- Total revenue $TR = P \times Q$
- Marginal revenue = $P [1 + \frac{1}{ed}]$ → Price elasticity of demand
- Average revenue $AR = \frac{P \times Q}{Q} = \frac{TR}{Q} = \text{price}$

③. Cross Plasticity of demand

$$\text{Cross Plasticity } Cd^* = \frac{\% \Delta \text{ quantity demand for good } X}{\% \Delta \text{ price for good } Y}$$

↓ decrease (-) / increase (+)

-ve : complement

+ve : substitute

$Cd^* > 0$: Substitute goods

$Cd^* < 0$: Complementary good

$Cd^* = 0$: Commodities X & Y ; not related

$$Cd = \frac{dQ_x}{dP_y} \times \frac{Y}{X}$$

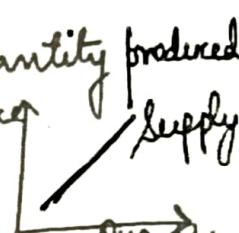
SUPPLY: Quantity of a product that producers are willing & able to provide at different market prices over a period of time
It is what they provide from scarce resources available

Law of Supply: Higher the price, larger the quantity produced

Price & Supply ↑

PRICE SUPPLY

↓
PRICE · SUPPLY



Elasticity of Supply: Change in supply of a commodity due to changes in economic variables such as price of that commodity, price of related goods, cost of production & seller's expectation.

$$Es = \frac{ds}{dp} \times p$$

→ RISK TAKING
→ TIME FACTOR
→ PRODUCTION TECHNIQUE
→ COST OF PRODUCTION

→ NATURE OF COMMODITY

Law of Returns: Behaviour of physical output when only 1 input is changed & others remain constant.



TP → Total Product

AP → Average Product

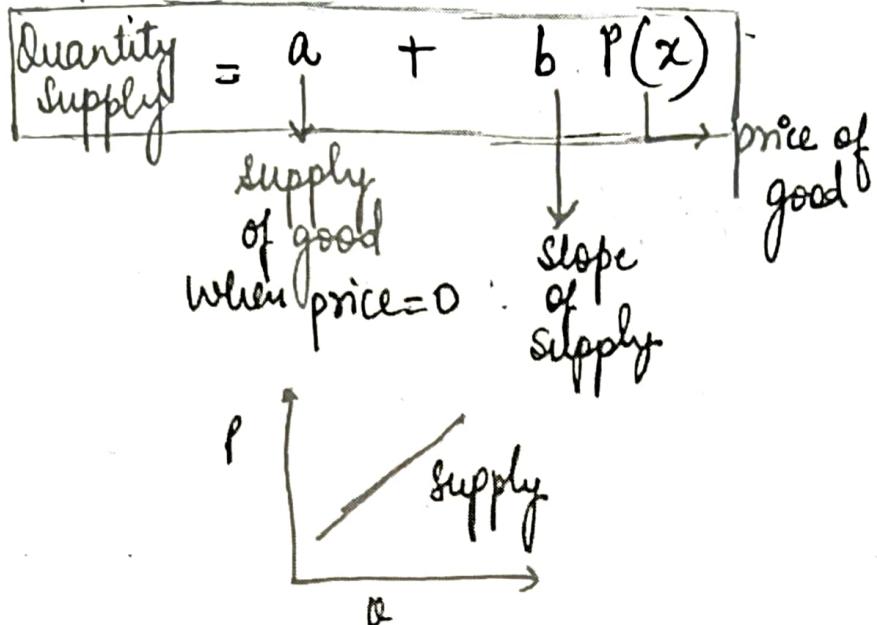
MP → Marginal Product

• Return To Scale - b/w All Inputs & Resulting O/P

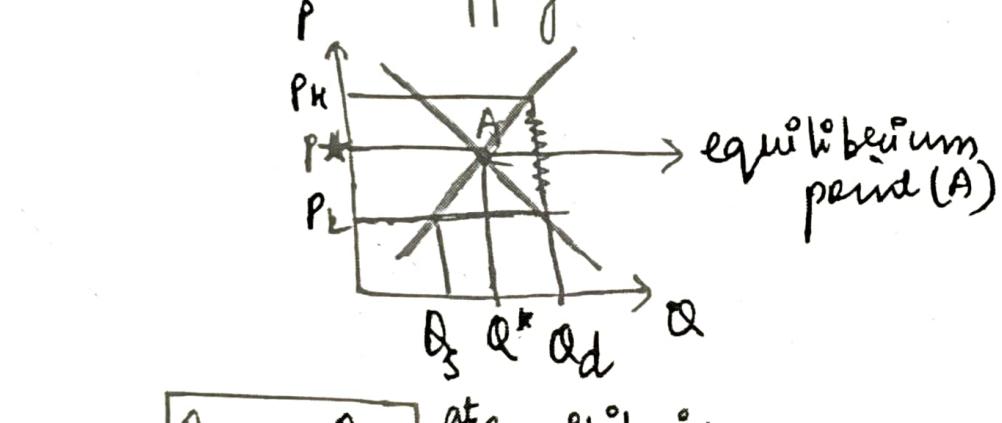
↳ Relationship

• Economies of Scale: When large scale production is carried out, a single firm as well as whole industry avail certain benefits

#Linear Supply Func?



Reln b/w demand & Supply



$$Q_d = Q_s \text{ at equilibrium}$$

Quantity demand Quantity Supply

→ Price is \downarrow than P^* i.e. P_L then $Q_d > Q_s$
(Excess demand / shortage)

→ Bidding (Buyers trying/willing to pay more)

→ Price is more than P^* i.e. P_H $Q_s > Q_d$
excess supply / surplus
 customers compete by lowering the price.

Law of Returns:

Production Funcⁿ: Transformⁿ of physical input into payoffs of output where O/P is funcⁿ of I/P.

$$Q = f(K, L \text{ etc.})$$

Quantity of O/P produced

funcⁿ depends on

factors of: I/P available to producer supply goods & services in economy

Quantity of O/P produced # Cobb-Douglas funcⁿ:

$$Q = bL^a K^{1-a}$$

Total factor productivity

I/P

Labour Capital

a : producⁿ elasticities of labour

$1-a$: " capital

- Production process: A set of I/P transformed into a set of O/P.
- Factors of Production

1) LAND

2) LABOUR: Any exertion of mind or body undertaken by a person for producing a product or service is labour.

Automobile (manufac^r) CAPITAL: A part of wealth other than land, which is high, technology used for further production of wealth.

Capital Intensive PP : Require more capital & less labour.

Labour Intensive PP : Require More Labour & less Capital.
eg: Industrial economy → Agriculture; Handicrafts

4) ENTERPRISE:

$$(%) = \frac{O/P}{I/P} \times 100$$

Return to scale:

Production Possibility Curve



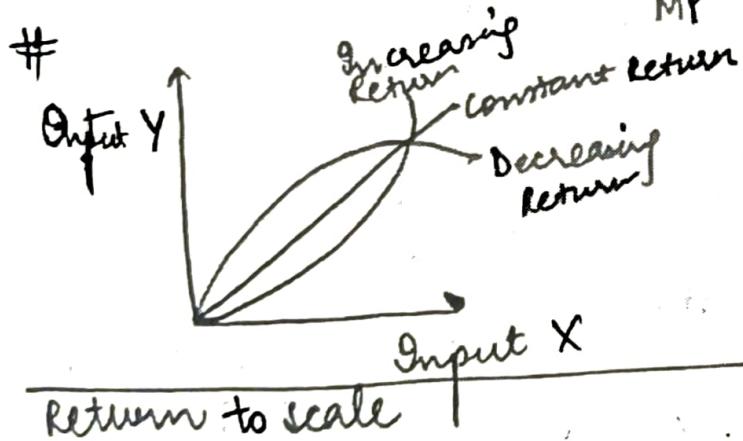
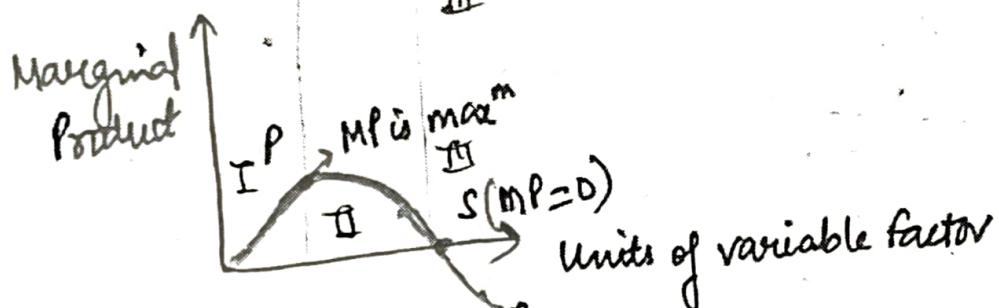
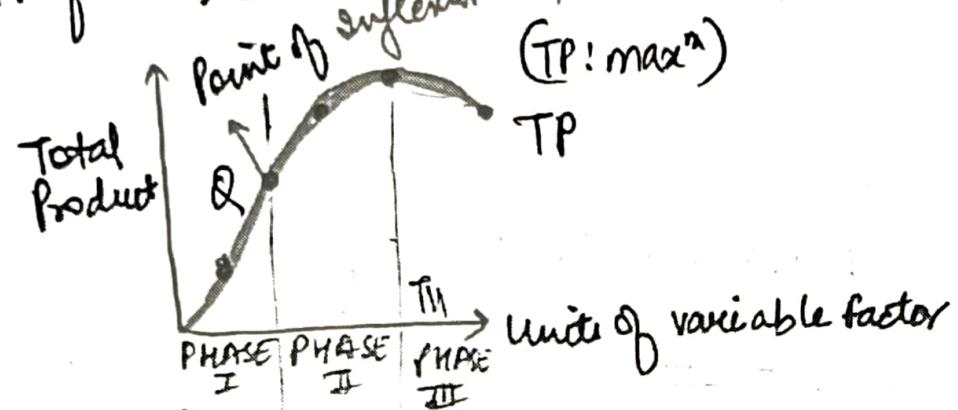
Law of Variable Proportions - As we increase the quantity of one input while keeping other inputs fixed, Total product initially increases at an increasing rate, then at a decreasing rate, & finally at a negative rate.

As per law of V.P.; changes in TP & MP in 3 phases

Phase I) TP rises at ↑↑ rate, MP ↑↑.

Phase II) TP rises at ↓↓ rate, MP ↓↓ & is +ve

Phase III) TP falls, MP = -ve → pt. where slope of TP curve changes



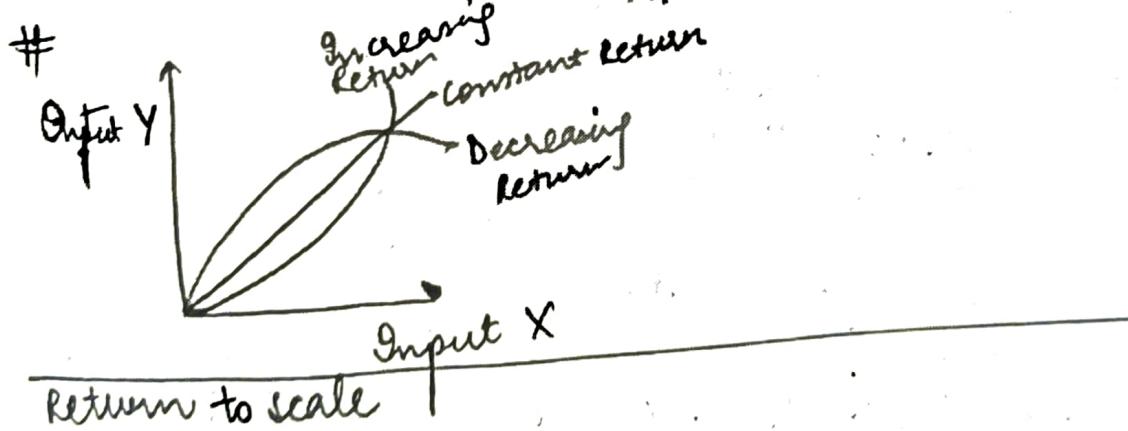
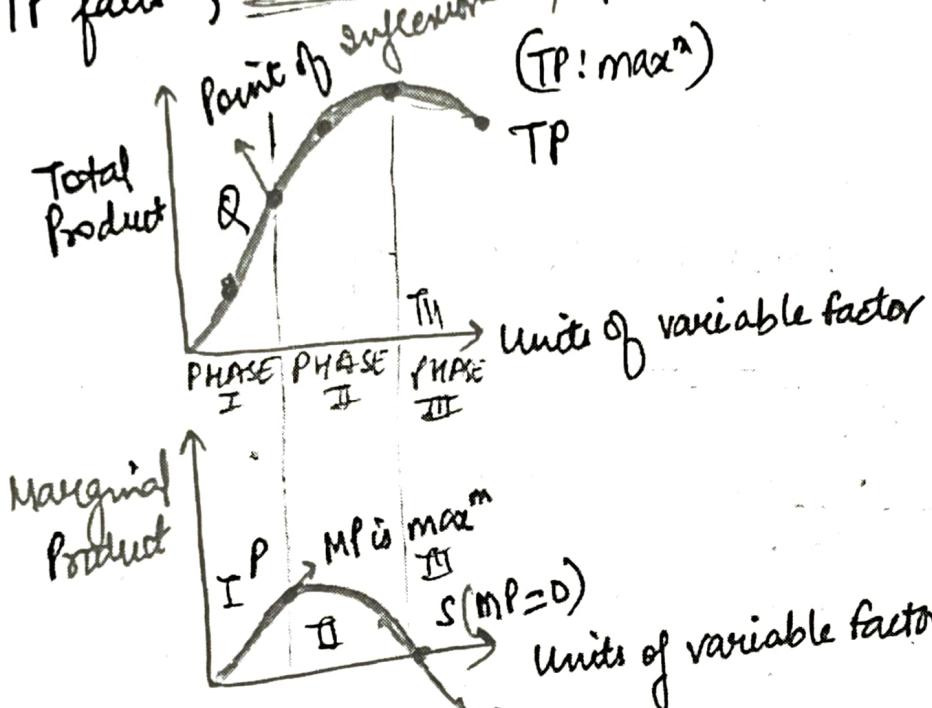
Sugarcane of Variable Proportion - As we fix the quantity of one input while keeping other inputs fixed, Total product initially at a increasing rate, then at a decreasing rate, & finally at a negative rate.

As per law of V.P.; changes in TP & MP in 3 phases

Phase 1) TP rises at ↑↑ rate, $MP \uparrow \uparrow$.

Phase 2) TP rises at ↓↓ rate, $MP \downarrow \downarrow$ & is +ve

Phase 3) TP falls, $MP = -ve$ → pt. where slope of TP curve changes



MARKET → Interface b/w producer & consumer
↳ Geographical space where producer & consumer of a product or service interact & negotiate for exchange.

Types of Market Structure

① Perfect competition - Large no. of buyers & sellers selling homogeneous product & price of product determined by the industry

- There are no barriers to entry & buyers have perfect knowledge about market.

→ Here; no. of sellers is so large that no single firm can influence price

② Monopoly market - Only a single seller of product where firms have full control over supply of product; there is absence of entry of firms & no close substitute are available

Natural monopoly: market demand is not enough to accommodate two firms.

Monopoly can last only if :-

→ It is legally created.

→ Obtained through \rightarrow Patent

→ Control over Raw material supplies

→ Market demand not enough to accommodate 2 firms.

③ Monopolistic market - Midway b/w Perfect competition & Monopoly,

→ No. of buyers & sellers : relatively low.

→ Freedom of entry & exit of firms & buyers have no perfect knowledge about the market.

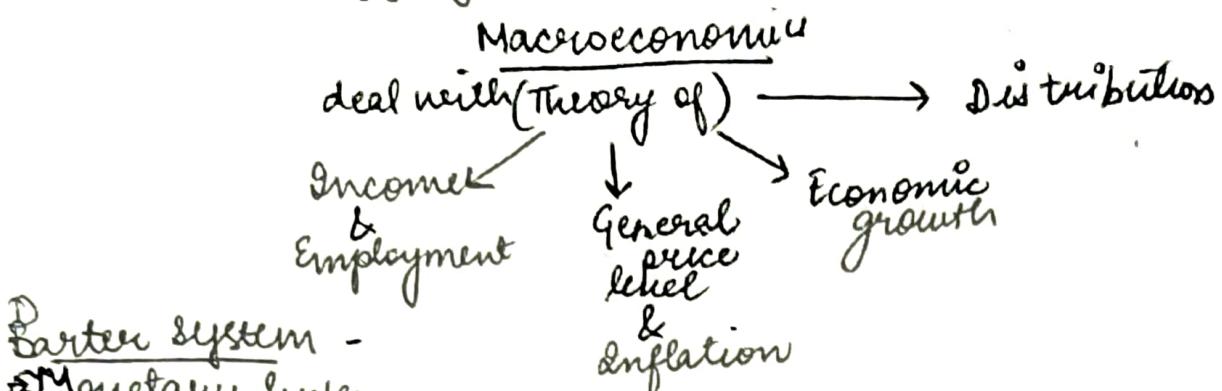
		Nature of Product
Number of firms		Homogeneous
MANY	Perfect competition	Heterogeneous/Differential
	—	Monopolistic competition
	Monopoly	Oligopoly

④ Oligopoly - Market situation where no. of producers in industry is small & produce Heterogeneous products



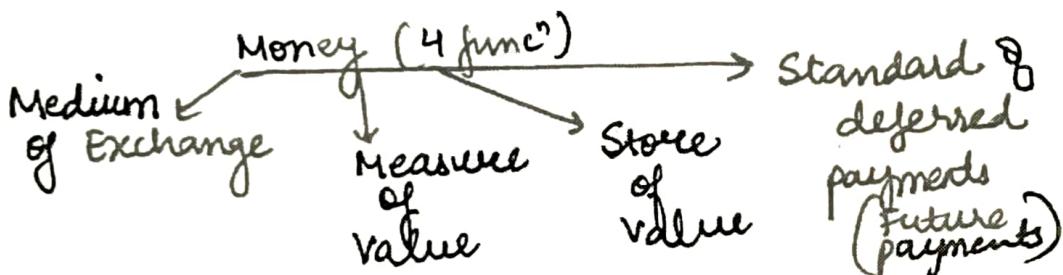
MACRO-ECONOMICS

→ Studies Economic Behaviour of "Big Economic Activities"
 a.k.a. "Aggregative Economics"



↳ Institutions by which a government provides Money in a country's Economy!

Money -
 'CROWTHER' : Money is anything that is generally acceptable as a means of exchange & at the same time, acts as a measure and as a store of value.



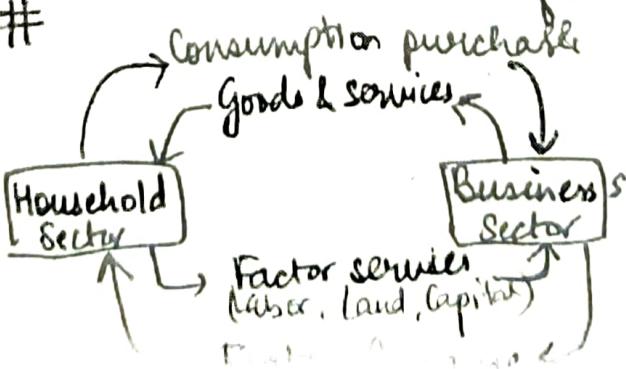
Functions of Money

- ① Primary func
- Medium of exchange
- Measure of value

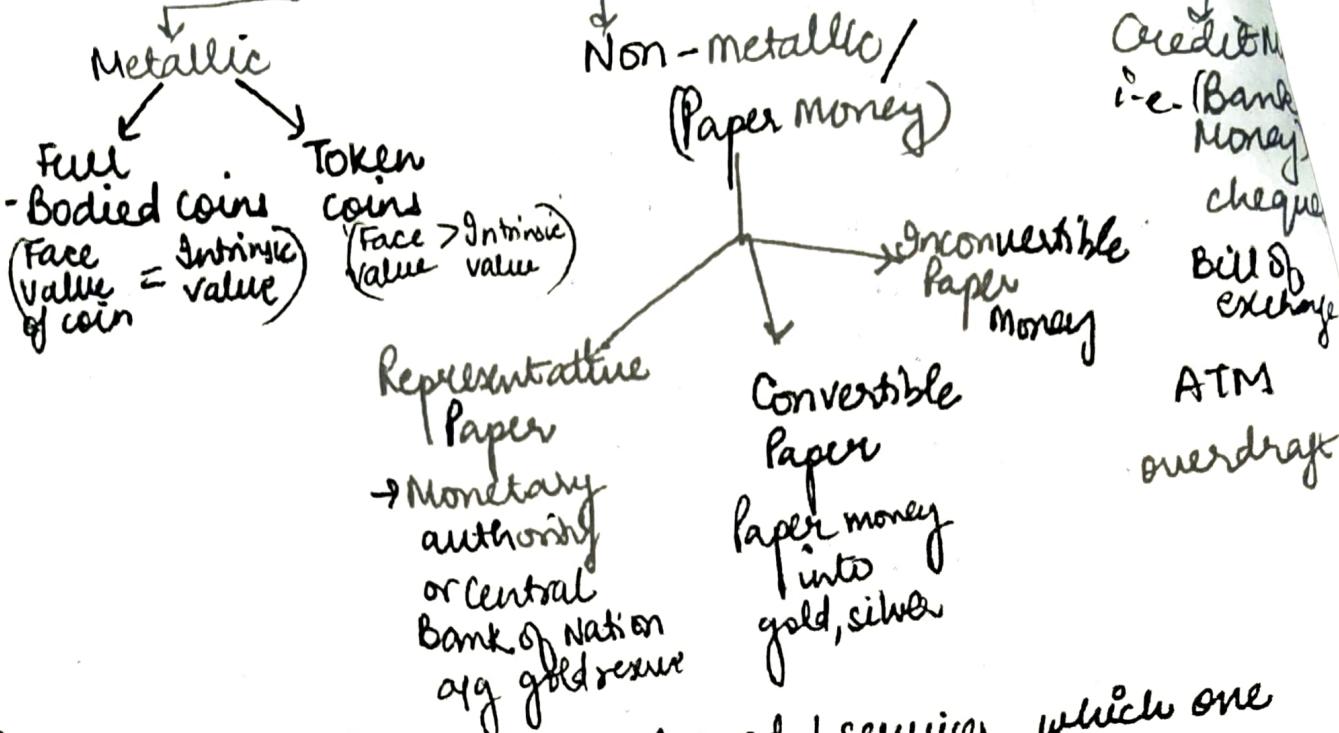
- ② Secondary func
- Standard of deferred payments
- Store of values
- Transfer of values
- ③ Contingent
- Basis of credit
- Liquidity
- Distribution of National Income
- Max. satisfaction of customer

Qualities of good money

- General Acceptability
- Durability
- Portability
- Homogeneity
- Malleability
- Stability of value



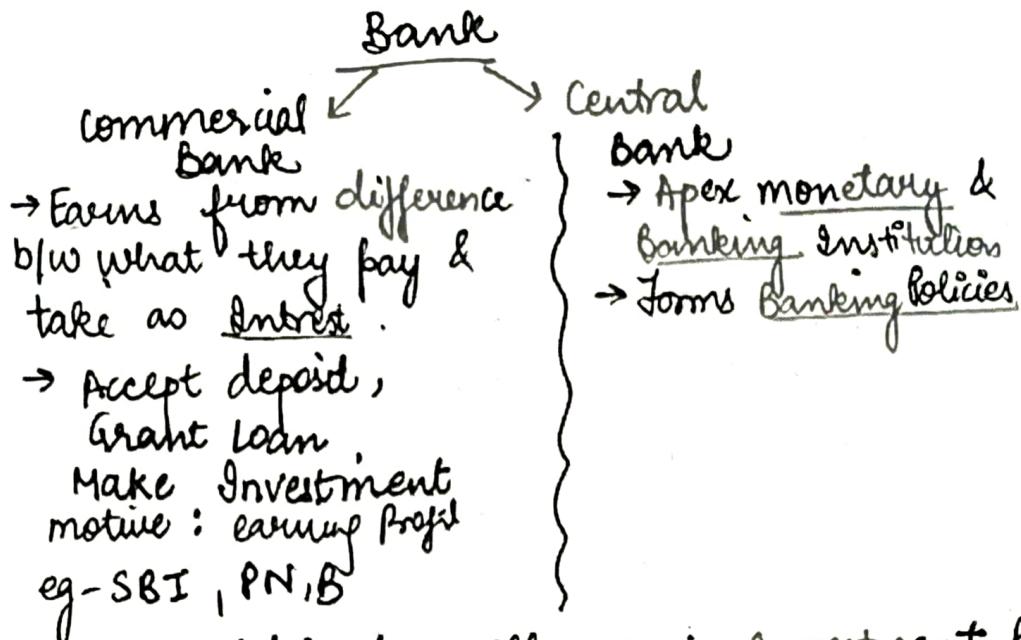
Classification of Money



- Value of Money - Amount of good / services, which one unit of money can purchase.
- It keeps on fluctuating.
- Index Number Series of figures by which changes in the size of economic phenomenon are measured from time to time
- Supply of Money
 - Total money : Aggregate amount of money in circulation, which is owned by public in the country.
 - 3 monetary institution responsible for Δ is money supply (in country)
 1. The State
 2. The commercial Bank
 3. The central Bank

- # Money Demand (for reasons!?)
1. Transaction demand
 2. Precautionary demand
 3. Speculative demand

BANK - Financial Institution that deals in Money & Credit.

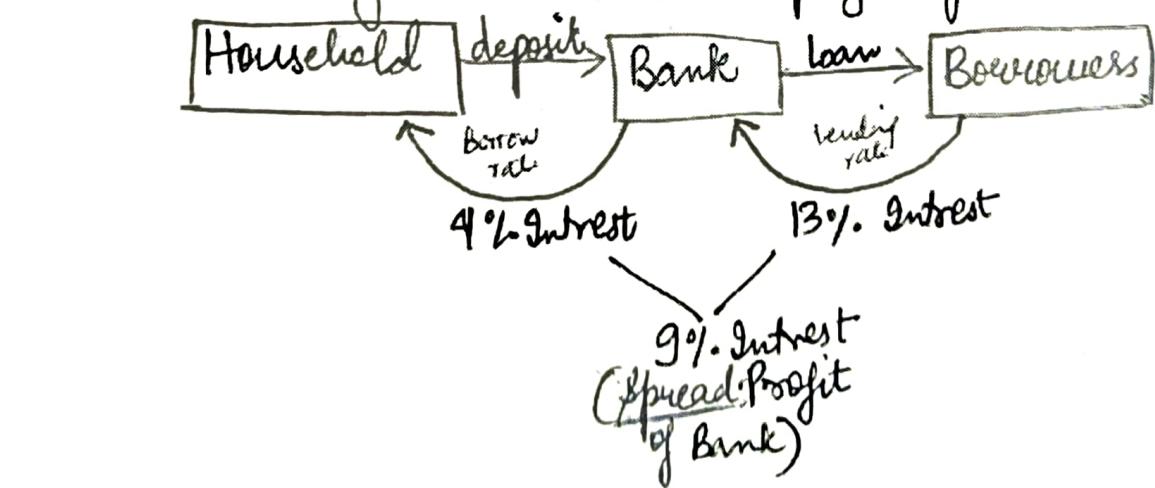


Commercial Bank : Offers basic investment products ↳ SAVINGS A/C, CURRENT A/C

- Provides financial services to the public such as accepting deposits, granting loans etc. to the customers
- Gives low interest to depositors] earns profit
- charges high interest to Borrowers]

Demand deposit Time deposit

- Bank Money can be withdrawn anytime.
- Withdrawn only after a period of time
- Bank: pays higher interests.



func' of Commercial Bank:

- ① Accepting deposit
 - ① Current A/C - Businessman (0% interest)
(unlimited transac')
 - ② Saving A/C
(limited transac')
 - ③ Fixed Deposit A/C (FD) ↳ more interest

② Advancing loan →

- ① Long Term → 1yr
- ② Demand Loan (Businessman) usually
- ③ Short Term < 1yr

③ Overdraft facility - Businessman

④ Discounting Bill of Exchange

Secondary func':

1) Agency func:

- collecting checks
- collecting Income
- Paying Expenses - like Insurance, Premium bill

2) General utility func':

- Providing locker facility for safekeeping of valuables.
- Issuing traveller's check.
- Dealing in Foreign Exchange - Import & Export ↳ RBI permission needed
- Transfer of funds

3) other:

- debit card, credit card
- Internet Banking

Central Bank: (RBI) (Reserve Bank of India) (1 April 1935)
CURRENT authority ↳ became central bank

↳ independent national authority that conducts Monetary Policy, regulates banks & provides financial services.
Goal: To stabilize the nation's currency, keep unemployment low & prevent inflation.

→ In every country; there is a central bank.
→ The Central Bank is the "apex" institution of financial system which operates, controls, directs & regulates the monetary & banking structure of a country.
→ Function: Control and regulate in economy of a country.

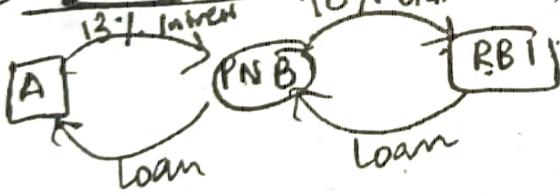
~~# func' of Central Bank:~~

- ① Currency Authority or Note Issue
 - ↳ To print notes.
 - RBI prints notes.
- ② Bankers Agent & Advisor of Govt.
- ③ Manages govt. undertaking, funds, gives loan to the government.
- ④ Advices govt. on Monetary, Banking & Financial Matter.
- ⑤ Custodian of cash reserve of commercial bank.
- ⑥ Custodian of foreign exchange
- ⑦ Lender of the last resort.
- ⑧ Clearing House function
(Comm. bank)
- ⑨ Controller of Credit & Money Supply

Quantitative

Quantitative

① Bank rate



dualitative

- ① Marginal requirement
Bank, Margin calls & loans
- ② Moral suasion
Work acc to policy.
- ③ Selective credit policy
- ④ collection of data

② Open Market operation

Buying & Selling of Govt. securities
i.e. Money coming into RBI

③ Legal Reserve Ratio / Requirement

CRR (Cash Reserve Ratio)

CB. 1000

SLR (Statutory Liquidity Ratio)

Ratio

200 LKR

1000 LKR

Commercial Bank

- Objective : Earn profit
- Several commercial banks
- Can be private & nationalized
- Commercialized bank.
- Perform general banking & agency services for general public.
- Deal with public directly.
- eg - PNB, SBI, ICICI in India

Central Bank

- Objective : Stimulate economy
- Only 1 central bank
- An autonomous institution
- Perform general banking & agency services for government
- Deal with commercial banks, other financial institutions & govt.
- RBI in India

MONETARY POLICY - Refers to measures taken to control & regulate money & credit supply in the economy.

Rate of interest : v. Imp here

- # To control volume of money in circulation
- Bank loan interest rate is ↑↑.
 - This reduces demand of Bank loan.
 - Ultimately, this reduces volume of money in circulation.

- # If there is large scale unemployment in economy:
- Bank loan interest rates are decreased ↓↓
 - This creates demand for bank loans & advances.
 - This ultimately eradicates unemployment upto a certain extent

TAX: Compulsory contribution by government of a country to the govt. exchequer.

Eg: Income Tax, Sales Tax

Type of taxes:

On Basis of Rate of Taxation

Proportional Tax
Same rate of tax

Progressive Tax
As income ↑ → Rate of tax ↑

On Basis of Burden of Tax

Direct Tax

- Tax paid by same person on whom burden of tax falls.
- eg - Income tax

Indirect Tax

- Different persons pay the tax & bears its burden.
- eg - Sales tax

On Basis of Place of Production

Excise duty

- Produced within a country, excise duty is imposed on product.

Custom duty

- Produced in foreign country & then imported by a country.
- Then country imposes custom duty on product.

SUBSIDY - Part of cost of product paid by govt. to industry with aim to keep price of product below its cost of production.

Reasons:

- ① To lower price of product, if used by less well-off sections of society.
eg - Food subsidy.
- ② To promote eco-friendly product.
eg - subsidy on CNG fuel.
- ③ As a counterbalancing measure to custom-duty imposed by an importing country, govt. of native country may give subsidy.

FISCAL POLICY -

→ Management of volume of currency in circulation & purchasing power in hands of public through Tax & Subsidy.

→ Govt. can impose high rate of taxation to ↓ the purchasing power of people. Thus; controlling Inflation
eg: Subsidy is given of fertilizers to induce farmers to use fertilizers in farms; which will ↑ farm productivity.

fiscal policy

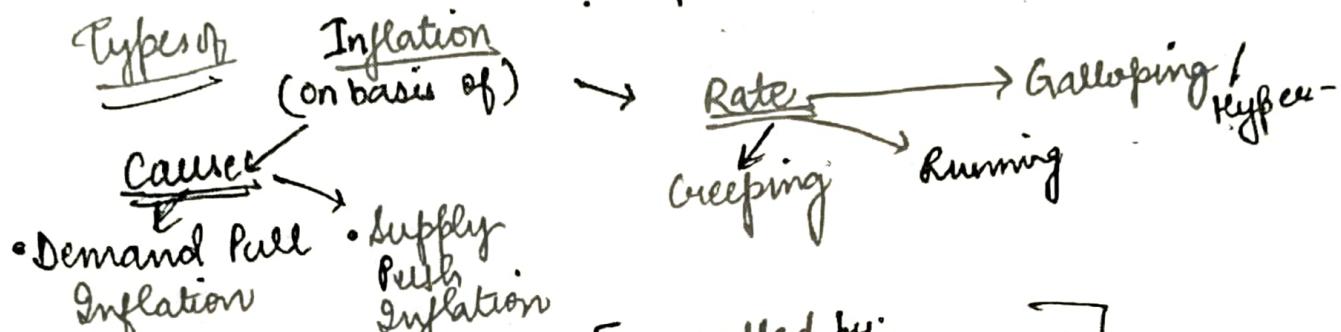
→ Recession

- Tax ↑ : Govt. lower spending consumer slowing down of economy.
- Reduce Government Spending

- Tax ↓ by govt. Higher spending
- Increase Govt. spending

Inflation - sustained ↑↑ in price level of goods & services in an economy over a period of time
 ↳ Reflects a reduction in purchasing power per unit of money.
 eg. यदि आज 50 ₹ का समान, तो 90 ₹ का था; \therefore Inflation.

In Developed country	<u>Inflation</u>	In Developing country
→ Inflation occurs after stage of full employment of resources.		→ Inflation may co-exist with under-employment of resources
		• This may be b/c of shortage of capital, equipment, poor power facilities



① Demand Pull Inflation : controlled by:
 When aggregate demand > aggregate supply

② Cost Push Inflation : production factor is expensive; then
 • ↑ in wages → difficult to control
 • ↑ in profit margin
 • Impose of heavy commodity taxes

③ Currency Inflation - more money becomes available without an ↑↑ in production & service.

④ Credit Inflation - Bank gives loan.
 money supply ↑ ; demand ↑ ;
 ∴ Production = same

Inflation

↳ Creeping = 3-1% p.a.	↳ Walking = 3-9% p.a.	↳ Running = 10-20% p.a.	↳ Galloping/Hyper = > 20% p.a.
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moderate . Single digit inflation is good for economy.

Indian Inflation was < 25%.)

EFFECTS OF INFLATION:

- ① In period of mild inflation, job seekers can be benefitted.
- ② In-ve inflation; loan payers (borrowed) money will have less value. ∴ benefitted.
- ③ Businessmen suffer as good becomes too expensive for people.
- ④ Lower savings
- ⑤ Less investment.

STEPS to control INFLATION

- Central Bank uses Monetary & Fiscal measures to avoid Inflation & Deflation.
- Govt. can ↑ taxes & interest rate on loan.

• Measurement of Inflation

① Consumer Price Index (CPI)

② Personal Income Compos'n Expenditure (PCE)

Business Cycle : / Trade Cycles / Economic Cycle

↳ Upward & downward movement of GDP (Gross Domestic Product)
along its long term nature growth rate?

→ Explains expansion & contractions in economic activity than economy experiences over time

→ Rhythmic fluctuations of economy in

Capitalist society level of

Peak Recession

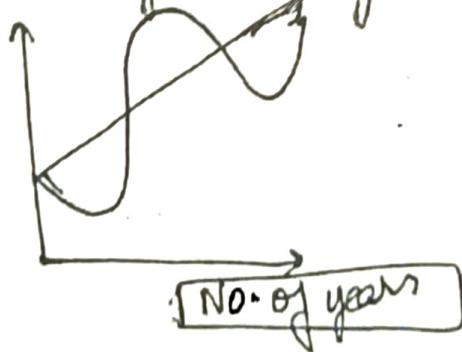
level of economic activity

Expansion

Depression

Recovery

Trough



- ① Expansion - ↑ in the economic growth / indicator
- Demand ↑ ; product expensive
 - Producers will invest more by taking loan.
 - employment
 - Income
 - O/P
 - wages
 - Profit
 - Demand & Supply of goods & services

(2) Peak -

- Saturation point.
- Maxm limit of growth is attained.
- Economic indicators don't grow more &
∴ are at their highest. Producers Invest more
 [After Peak if Producer Invest \rightarrow ~~3rd~~ Return \rightarrow ~~3rd~~]
- Marks reversal in trend of economic growth.

(3) Recession -

- Follows peak phase.
- Demand of goods start declining
- Producers note decrease in demand & go on producing; ∴ excess supply \Rightarrow Price falls.
- Economic Indicators begins to fall.

(4) Depression - (Economy growth rate become -ve)

- ↑ in unemployment
- ↓ in O/P, trade etc.
- ↓↓ in Demand; Price ↓↓
- ↓↓ in Demand of Loan ↓
- ∴ Overall economic growth ↓↓
- stage: Depresn & falls below steady growth rate

(5) Trough - Depresn: economic growth rate -ve.

further decline in prices of factors

↳ in demand
↳ in supply of goods & services
reach their lowest

[-ve saturation for economy]

- (6) Recovery - Economy starts recovering, -ve growth rate
 → Due to low prices, demand begins to ↑, producⁿ↑.
 → Employment gives to rise. Producers invest more.
 → Govt. want to producⁿ, ↑ in expenditure like make dams, metro statⁿ roads, demand ↑ & producers profit ↑.

BOT

- Balance of Trade
- Only visible transacⁿ
- Can be favourable/unfavourable.
- $\text{BOT} = \frac{\text{Net earning on Export}}{\text{Net Payment for Import}}$

BOP

- Balance of Payment
- All transacⁿ related to visible, invisible & Capital Transfers
- Always balances itself.
- $\text{BOP} = \frac{\text{Current A/C}}{\text{Capital A/C}} + \frac{\text{Capital A/C}}{\text{Current A/C}} - \text{Balance item}$

Current A/C

- Trade balance of country & also of country & also of direct payment & net income.
- Affects net income of country
- Deals with International Trade.
- Goods - Services, Income, Transfers

Capital A/C

- Representation of capital movements & expenditure that don't affect country's trade.
- Affects current/financial A/C
- Deals with applicⁿ of capital & how they are covered.
- Investment, loan, NRI /A/C

BOP

- Current A/C - Flow of good, services & income
- Capital A/C - Flow of capital, investment loan
- Financial A/C - change in ownership of financial

Autonomous Transaction

- International transaction undertaken for profit motive.
- Undertaken by private sector
- undertaken irrespective of effect on BOP.

Accommodating Transaction

- International transaction undertaken to cover BOP surplus / Deficit.
- Undertaken by Monetary Authority (Central Bank, RBI)
- Undertaken after seeing status of BOP Surplus / Deficit

Free Trade

- Protects Jobs
- Prevents Dumping.
- Provide access to more market.
- Strengthen political interest.

Protectionism

- Protects Domestic Industries
- Protects national culture
- Add cost to consumer.
- ↑ Int. competition & n

Dumping: Exporting a product at a price that is lower in foreign market than price charged in exporter's domestic market.

Tariff Barriers

Duties & Tax imposed on Imported goods.

- Attack on price of commodity
- Restricts Imports Indirectly

Non-Tariff Barriers

Quantit. & exchange control restriction imposed to restrict imports.

- Attacks on quantity of com
- Restricts imports Directly

Quotas - Import limits that prevent more than a set amount of specific good from being imported in a country.