

Economic Growth & Economic Development

Economic Growth

- It is related with the increase in production of goods and services during a given time period.
- It is quantitative in nature
- It can be measured.
- It is a narrow concept and unidimensional in nature
- Indicators of Economic growth are:
GDP, per capital income,

Economic Development

- It is related with the growth in production along with social welfare, development in technology, improvement in living standard, poverty alleviation.
- It is both qualitative & quantitative.
- It cannot be measured.
- It is a broad concept and multidimensional in nature.
- Indicators of Economic development are:
 - HDI (Human Development Index)
 - GDI (Gender Development index)
 - GII (Gender inequality index)
 - GND (Gross National Devpt)
 - MPI (Multidimensional poverty index)

National Income

- In India, the National Income is calculated by NSO
- In India, the 1st estimation of National Income (1867-68)
 - ↳ Dadabhai Naoropi - "Poverty & unbritish rule in India"

Drain of wealth

- He calculated that per capita Income was ₹20
- 1st scientific estimation of National Income (1931-32)

prof VKRV Rao

He calculated per capital was ₹77.90

- 1st official estimation of National Income - 1949 - National Income committee

This committee was headed by P.C. Mahalanobis

- Father of National Income in the world: 'Simon Kuznet'
Nobel prize of 1971

- In 2015, India adopted UN based SNA-2008 (System of National Account)

Domestic territory

- It includes the political territory of India along with the followings:
 - (a) Embassy, consulates, High commissions, military establishments / army in another countries
 - (b) Ships, Aeroplanes, etc by Indians in another countries.
 - (c) Research centers like Himadri, Bharti, Matri etc in Arctic, Antarctic or in space.
 - (d) EEZ (Exclusive Economic zone) - 200nm nautical miles. (370-400km)

Normal Residents

- These include individuals or institutions of our country.
- Those foreign nationals who are for more than 1 year in India and their economic interest also lie in India. (excluding students and foreign nationals for medical purposes)
- Normal Resident includes:
 - (a) Indians working in International org like IMF, WHO, etc. whose office is in India.

(b) Indians working in foreign companies whose offices are located in India.

(c) Indians working in foreign embassy located in India

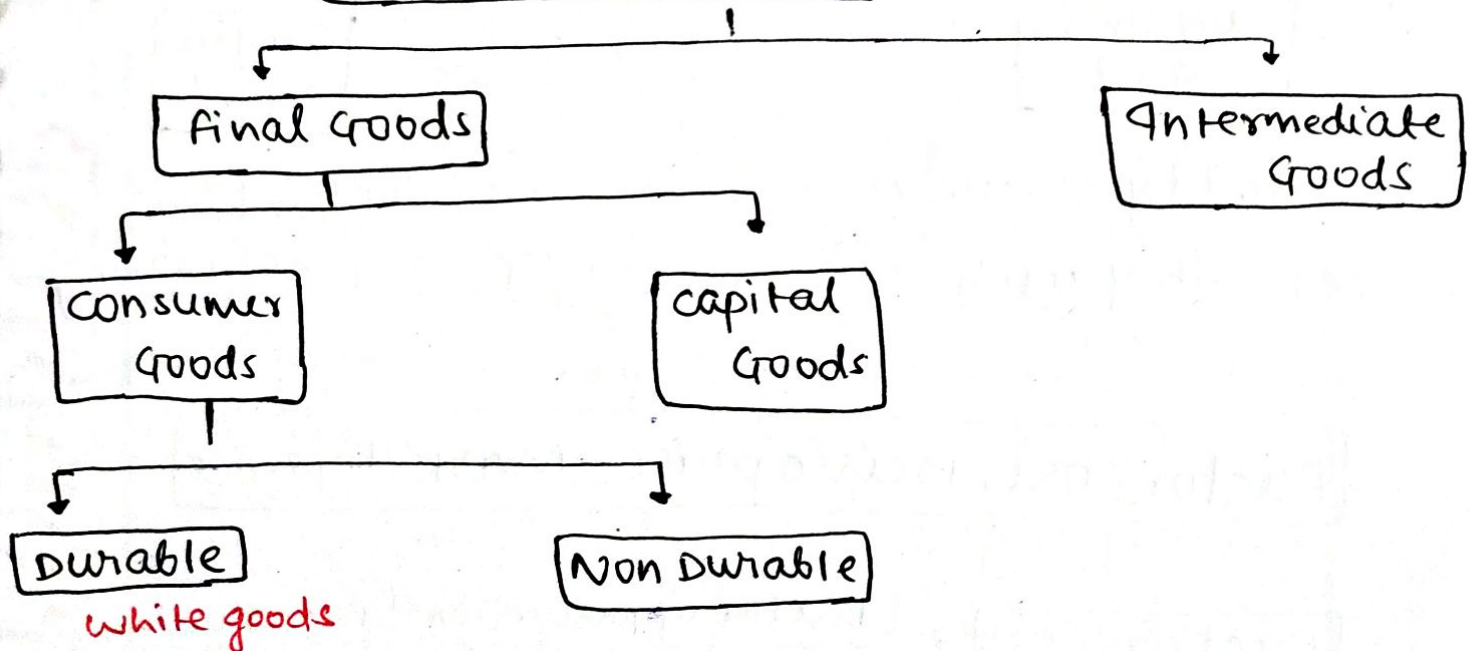
• Normal Resident do not include the following:

(a) foreign nationals working in Indian embassy in abroad. (foreign countries)

(b) The foreign nationals working in the International organisation whose offices are located in India.

(c) foreign nationals working in foreign embassy situated in India.

Types of Goods



Intermediate Goods

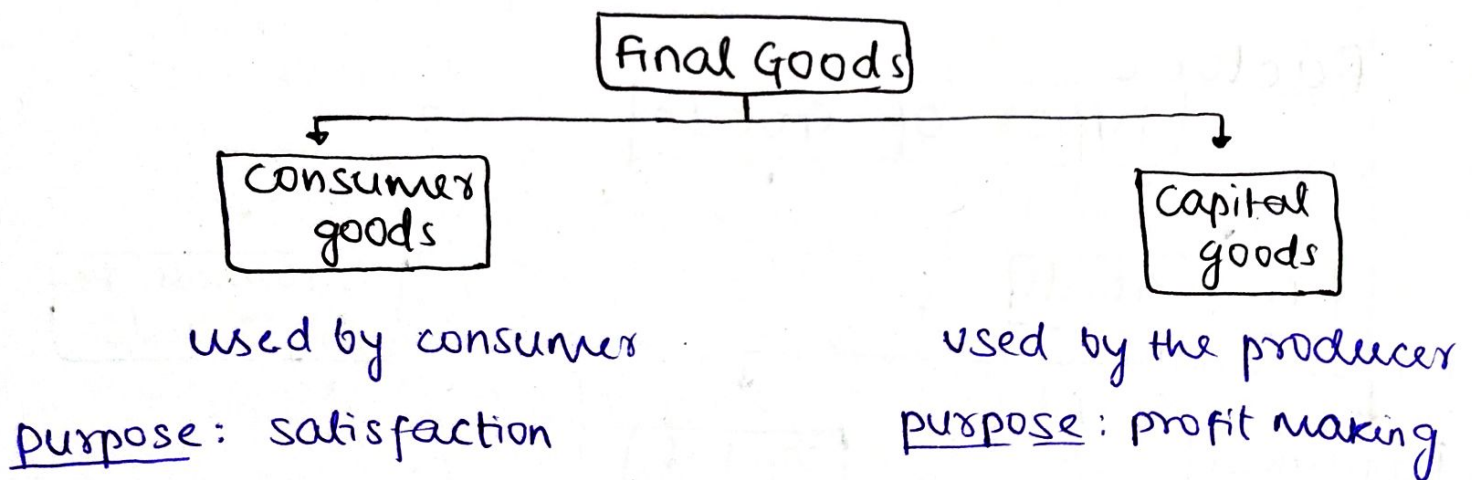
Goods which are meant for further production and these goods are used by the producers.

Note: The value of intermediate goods does not include in the calculation of GDP

Final Goods

Those goods which are meant for final consumption purpose. They are used by both consumer and producers. *capital goods*

Note: In the calculation of GDP, the value of final goods is included.



Factor cost, Basic price, Market price

Factor cost	Factor of production	Factor payment
	land	Rent
	labour	wages
	capital	interest
	organisation	profit

It is the expenditure incurred by the producer on factors of production

Basic Price

$$\text{Basic Price} = \text{Factor cost} + \text{Production tax} - \text{production Subsidy}$$

Production tax: Stamp Duty, professional tax, Land revenue, licence tax, Registration fee

production subsidy: Subsidies to Railways, farmers (fertilizers), village and small Industries.

Market Price

$$\text{Market Price (MP)} = \text{Basic Price} + \text{Product tax} - \text{product Subsidy}$$

Product Tax: Excise duty, sales tax, service tax (GST)

product subsidy: Food, fertilizers, Interest subsidy (Subvention)

Note: Basic price is the minimum price ^{which} a producer is expecting from the market.

- Market price is the price of the product in the market

$$\boxed{MP - NIT = FC}$$

$NIT = \text{Net Indirect tax}$
(Difference)

$$MP - (IT - Sub) = FC$$

$$\boxed{MP - IT + Sub = FC}$$

$IT = \text{Indirect tax}$

$Sub = \text{subsidy}$

National Income Aggregates

GDP_{MP}

GDP_{FC}

NDP_{MP}

NDP_{FC}

GNP_{MP}

GNP_{FC}

NNP_{MP}

NNP_{FC}

Gross Domestic product at Market Price (GDP_{MP})

It is the sum total of market value of all final goods and services produced within the domestic territory of a country by the normal resident during 1 financial year. including depreciation.

Note: In the calculation of GDP, only those goods and services are included which produced within the domestic territory.

- In the calculation of GDP, only the value of final goods ^{and services} is included.

Farmer
wheat

mill-man
Flour

Bakery-man
Bread/Biscuits

(Final goods)

- £ 1000 → value added £ 300 → £ 1300 → value added £ 200 → £ 1500 GDP
- £ 1000 + £ 300 + £ 200 = £ 1500 GVA

$$\Sigma GVA = GDP$$

GDP

GVA

- $\Sigma GVA \text{ at basic price} + \text{product tax} - \text{product subsidies} = GDP_{mp}$

- GDP is for the entire country but ~~it~~ tells us about all

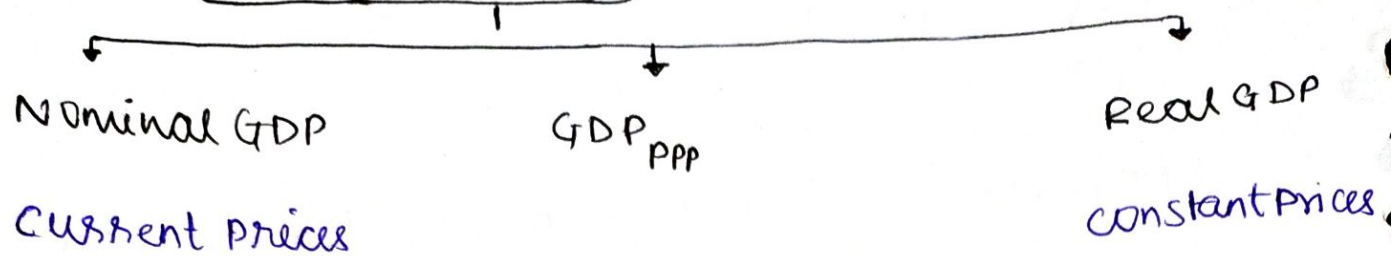
$$GDP = GDP_{mp}$$

- GDP is related with consumer

- ^{about the value addition} GVA tells of different sectors and enterprises.

- GVA is related with producer.

Types of GDP



Nominal GDP v/s Real GDP

Nominal GDP

- current year production $\times$ current year Price
- It is not adjusted with Inflation. (inflation included)
- It is easy to calculate
- It is more than Real GDP
- It helps in interquater comparision.
- It is not helpful in measuring Economic growth.

Real GDP

- Current year production $\times$ Base year price
- It is adjusted with Inflation (-)
- It is difficult to calculate
- It is less than Real GDP
- It helps in the compansion of different financial year.
- It is helpful in measuring economic growth.

	2011-12		2020-21		2021-22		22-23		22-23	
	Qt	Price	Q	P	Q	P	Q	P	Q	P
wheat	100	500	150	700	80	1200	200	400	200	500
Rice	700	1000	1000	1200	300	2500	1500	600	1500	1000
	50,000	10	10,5000		96000	80,000	80,000		100,000	
	7,00,000		12,00,000		7,50,000	9,00,000	9,00,000		15,00,000	
	7,50,000		13,05000		8,46000	9,80,000	9,80,000		16,00,000	
							Nominal GDP		Real GDP	

- Value Addition = Value of output - Intermediate consumption

$$VA = \text{Sales} + \text{change in stock} - IC (\text{purchases})$$

$$VA = \text{Sales} + CS - OS - IC$$

CS - closing stock

OS - opening stock

$$\begin{matrix} PS & + & SS & + & TS & = & GVA \\ VA & & VA & & VA & & \end{matrix}$$

- 2022-2023 : Annual growth Rate (GDP growth) - 7.2%.
As per Economic survey 2022-23 - India's GDP growth rate is 7%.
- Economic survey 2022-2023 - projected Economic growth Rate for 2023-2024 - 6-6.8%.
- On 12 June 2023, India's GDP - \$3.75 trillion and in terms of nominal GDP, India's rank is 5th in the world.
- 2021-2022 - \$2.8 trillion (₹ 234.71 lakh crore)
2022-2023 - \$3.30 trillion (₹ 272.41 lakh crore) } India's nominal GDP
- India's Economic growth Rate (Real GDP) :
↳ as per Economic Survey
 - 2019-2020 : 3.7%.
 - 2020-2021 : -6.6%.
 - 2021-2022 : 8.7%.
 - 2022-2023 : 7% (7.2%)
 - 2023-2024 : 6-6.8% (6.5%)
- GDP per capita Income 2022-2023 : ₹1,72,000
- India's Rank in the world :
Nominal GDP : 5th
GDP PPP : 3rd

• Reasons for increasing ^{Economic} growth Rate in India are as follows:

- Increasing consumer's demand (J.M Keynes)
- Efficient financial management
- High saving rate (high investment)
- favorable Demographic trends.

Changes in the National Income calculation after adopting SNA-2008 in 2015

- Change in the Base year: 2004-05 to 2011-2012
- Broad Data collection Base - Earlier around 2 lakh companies data was taking into consideration now it is 5 lakh
- Earlier GDP_{PC} was the main factor of Economic growth now it has been replaced by GDP_{MP}
- Government started considering the sector wise contribution in the Economy with the help of GVA_{BP}

- NDP_{MP} (Net Domestic Product at Market Price)

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

Note: If the depreciation is excluding from the total value of production then it is called Net

- GDP_{MP} signifies total amount of production in the company, but NDP_{MP} signifies that if the total value of production what is the level of Depreciation.

$$\text{Gross} - \text{Depreciation} = \text{Net}$$

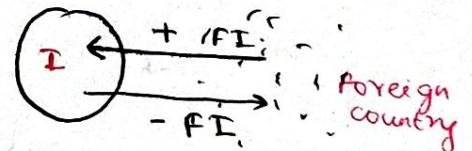
- GNP_{MP} (Gross National Product at Market Price)

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

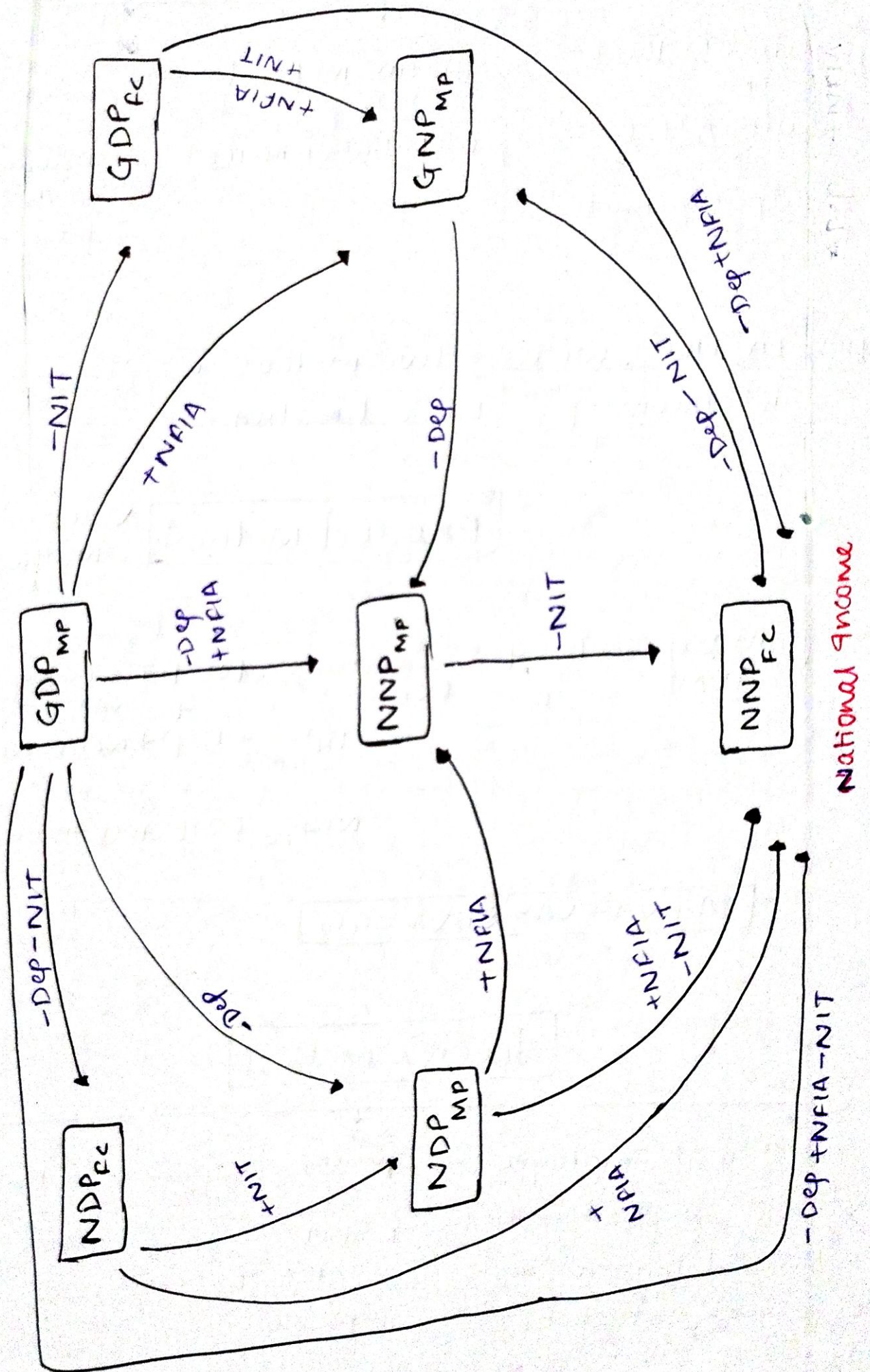
↳ Net factor income from Abroad
(Export - Import)

$$\text{Domestic} + NFIA = \text{National}$$

$$\text{Domestic} + \underbrace{\text{Export} - \text{Import}}_{(NFIA)} = \text{National}$$



- NNP_{MP} (Net National Product at Market Price)



Methods of Calculating National Income

Product Method
OR

Value-Added
OR

output method

Income method
OR

Distribution method

Expenditure M
OR

consumption M
OR

Total outlay M

Note : In India, we use two methods i.e. production and Income ^{approach} for GDP Estimation.

Product Method

Value-added method.

$$\begin{aligned} &\text{primary sector (VA)} + \text{secondary sector (VA)} + \text{Tertiary sector (VA)} = \sum GVA = GDP \\ &= GDP_{MP} - Dep + NPFA - NIT \\ &= NNP_{FC} \text{ (National Income)} \end{aligned}$$

$$VA + VA + VA = \sum GVA = GDP$$

Income method

A compensation of Employee

- ① wages & salaries → cash kind
- ② Retirement Pension
- ③ Employer's contribution to social security scheme

↓
PF

B operating Surplus

↓
Rent + Royalty
+ Interest
+ profit

C Mixed Income

↓
unorganised &
self-employment

$$A + B + C = \text{NDP}_{FC} + \text{NFIA} = \text{NNP}_{FC} = \text{National Income}$$

Expenditure method

consumption method

$$\text{GDP}_{MP} = C + I + G + \underbrace{X - M}_{\text{Net Export}}$$

OR

AD
↓
Aggregate demand

Net Export

C = consumption expenditure

I = Investment "

G = Government "

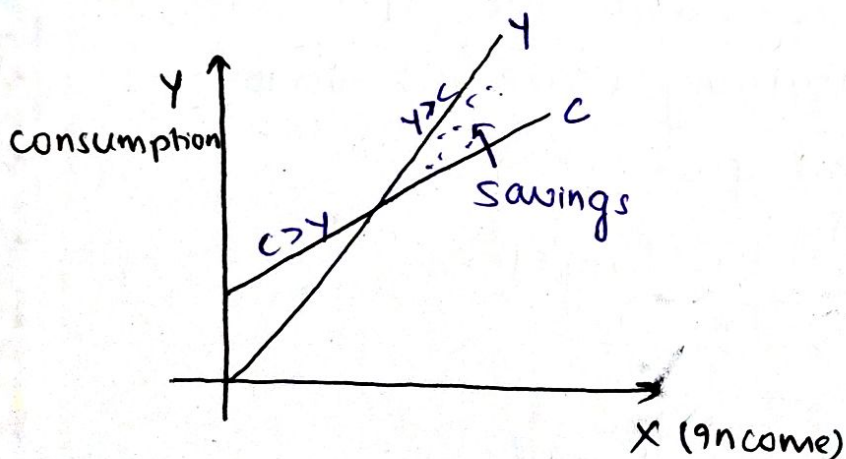
X = Export

M = Import

$$\left\{ \begin{array}{l} \text{private final consumption expend} \\ + \\ \text{Govt final consumption expend} \\ + \\ \text{GDP}_{FC} \\ + \\ \text{Net Export} \end{array} \right\} = \text{GDP}_{MP}$$

Consumption Expenditure

Satisfaction



Y = yield
C = consumption

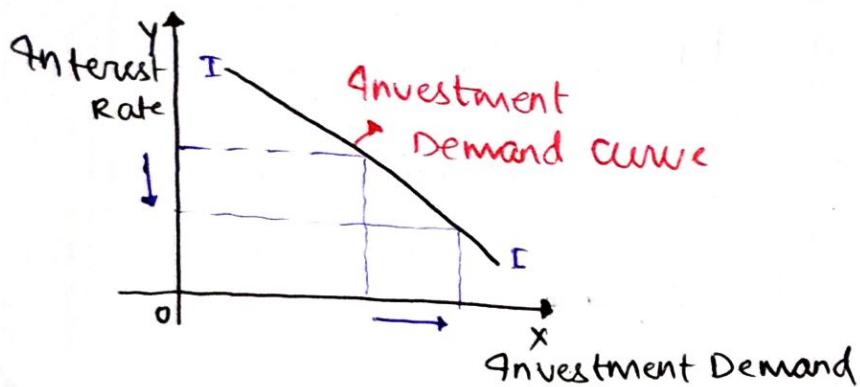
$$\textcircled{1} Y \uparrow \quad C \uparrow$$

$$\textcircled{2} \frac{\Delta C}{\Delta Y} = \text{MPC} < 1$$

- As the income increases consumption also increases i.e. Income and consumption both are $\oplus$ vely correlated with each other ($C > Y$)
- After reaching a certain point the change in income is more than change in consumption. i.e. the people start saving money. ($Y > C$)
- MPC (Marginal propensity to consume) = $\frac{\Delta C}{\Delta Y}$
As per the J.M Keynes,
$$\frac{\Delta C}{\Delta Y} < 1$$

Investment Expenditure

- Investment is done by the producers.
- The main purpose of investment is to make profit.
- Investment is related with the expenditure on fixed asset like building, machines another resources like raw material, fuel etc
- Generally, investment is long term in nature i.e. more than 1 year
- A/c to Keynes, investment and interest rate are negatively correlated with each other. i.e. with the increase in interest rate the investment decreases, and vice versa.



Government Expenditure

Government Expenditure

consumer Expenditure
(social welfare)

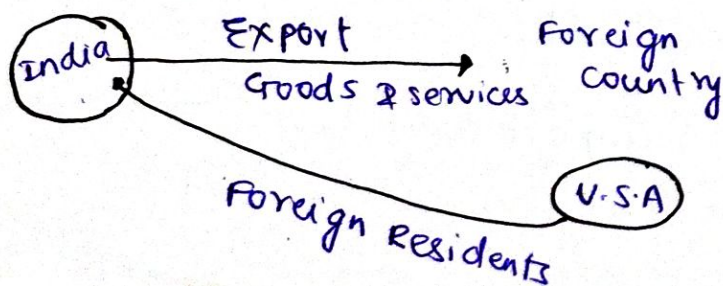
↓
Scholarship
old age pension
unemployment

Investment Expenditure

↓
Roads, Dams, Metros
Railways

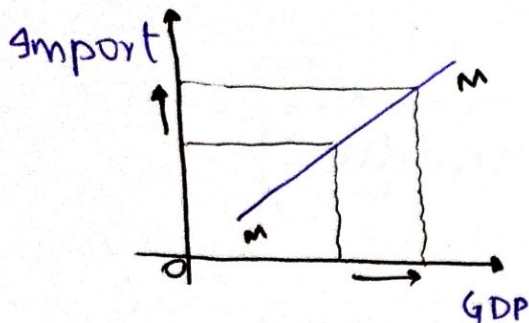
Export

(Residents)
When foreign nationals purchase Indian commodities either in their own country or in India.



Import

- When Indian resident purchase foreign goods and services either in their own country or in foreign country.



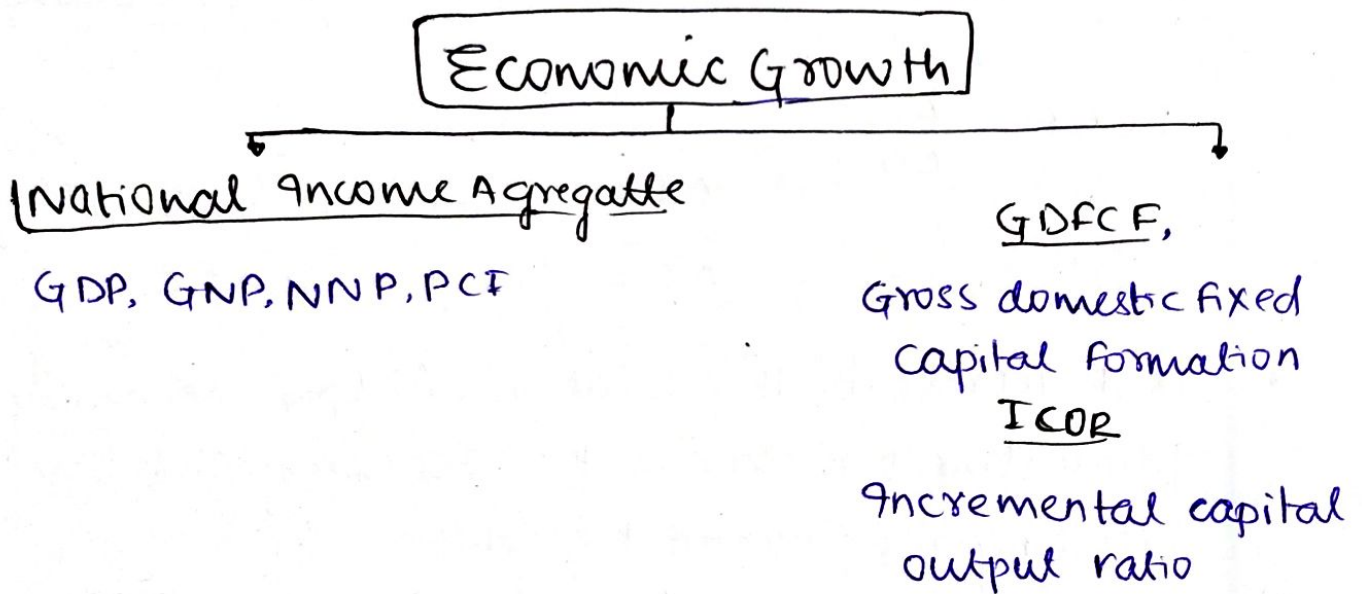
Import, Export : A/c to Keynes

- In general, for a country ^{when} export is more than import then it is considered good for the economy as it leads to 'Trade surplus'
- If imports exceeds exports then it is called 'Trade deficit'
- According to Keynes;
 - Both imports and exports are good for the country.
 - If the export increases
↓
level of production increases, Employment increases, inflow of foreign capital increases in India. etc.
 - If the import increases

It indicates robust domestic demand and growing Economy.

Note: If we are importing productive assets like machines and equipments then it is more favorable for a country as it helps in more production for long term.

- If in India $Ex \downarrow$ $Im \uparrow$ It signifies that Indian Economy is better than foreign Economy.
- If in India $Ex \uparrow$ $Im \downarrow$ It signifies that Indian Economy is not performing better than foreign Economy.



Gross Domestic Fixed Capital Formation (GDFCF)

It is the total amount of investment made in the production of physical asset like building, machines, equipment, infrastructure, etc within a country

during a specific period. It indicates increase in ~~capital~~ the nation's capital stock and production capacity.

- If GDFCF is more then there would be more Economic growth.
- GDFCF includes:
 - (a) Buildings
 - (b) machines & Equipment
 - (c) software i.e technology
 - (d) Defence, weapons etc.

Incremental capital output Ratio (ICOR)

$$\left[\text{ICOR} = \frac{\Delta I}{\Delta O} \right]$$

ΔI = Change in Investment

ΔO = Change in output

- ICOR represents the relationship b/w the amount of investment made in the Economy and the resulting increase in the GDP.

- $\text{ICOR} = \frac{\Delta I}{\Delta O}$

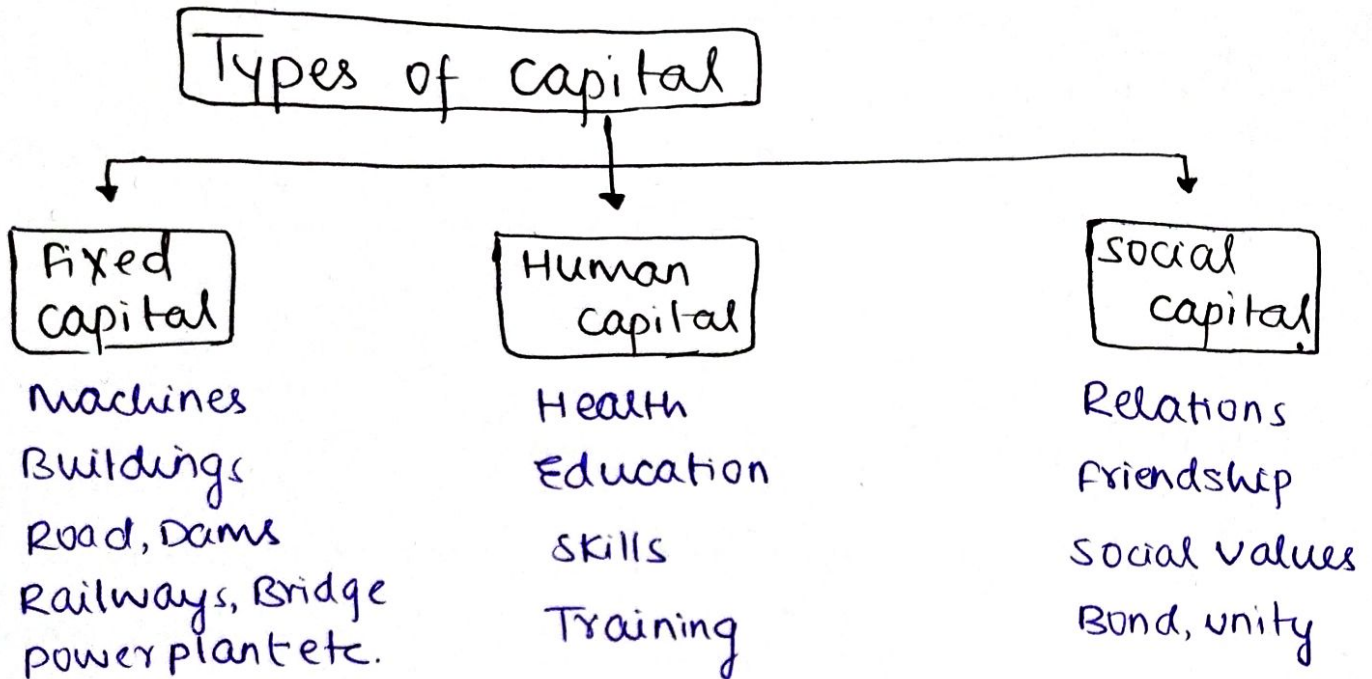
$$\rightarrow \text{ICOR}_1 = \frac{10}{5} = 2$$

$$\rightarrow \text{ICOR}_2 = \frac{5}{10} = 0.5$$

ICOR_2 is better than ICOR_1 i.e the lower ICOR

indicates that the country's production is more efficient.

- For 2022, In India ICOR was 3.5

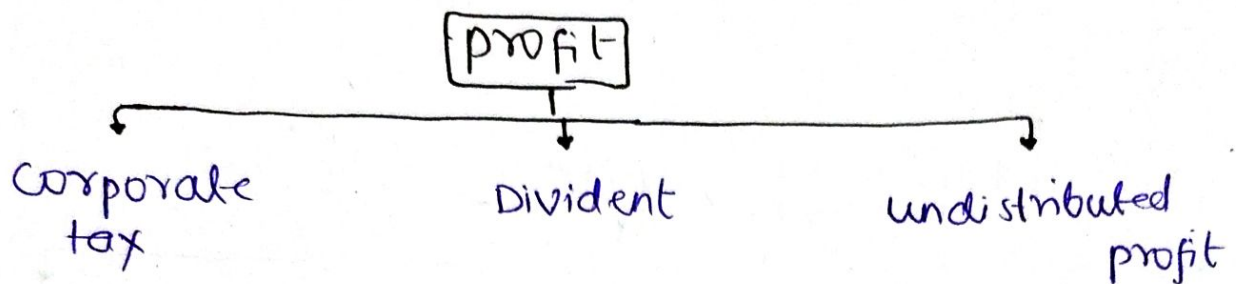


Types of Income of country

- ① National Income : NNP_{fc}
- ② Per capita Income (PCI) :
$$\frac{\text{National Income / Net NI / } NNP_{fc}}{\text{Total population.}}$$
- ③ Private Income :
$$\begin{aligned} &\text{Income of private sector} \\ &+ \\ &NPIA \\ &+ \\ &\text{Net current transfer from rest} \\ &\quad \text{of the world} \\ &+ \\ &\text{National Debt Interest} \\ &+ \\ &\text{Current transfer from govt} \end{aligned}$$

④ Personal Income:

private income - corporate tax - undistributed profit



⑤ Personal Disposable Income:

PDI = Personal Income - Direct taxes - Misc
Fee & Fines

It is used for measuring 'Standard of Living'

Not included in National Income

- Income earned from buying and selling of 2nd hand goods
- Income earned from illegal activities (Smuggling, gambling, ^{loitering} etc)
- value of intermediate goods
- Income earned by foreign country in India.
- Black money

- Transfer payments [getting of money without giving any services]

Ex: unemployment allowances, old age pension, scholarship

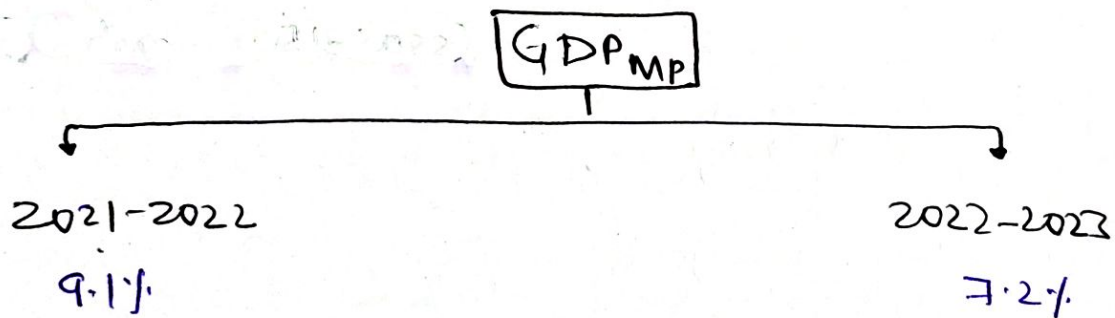
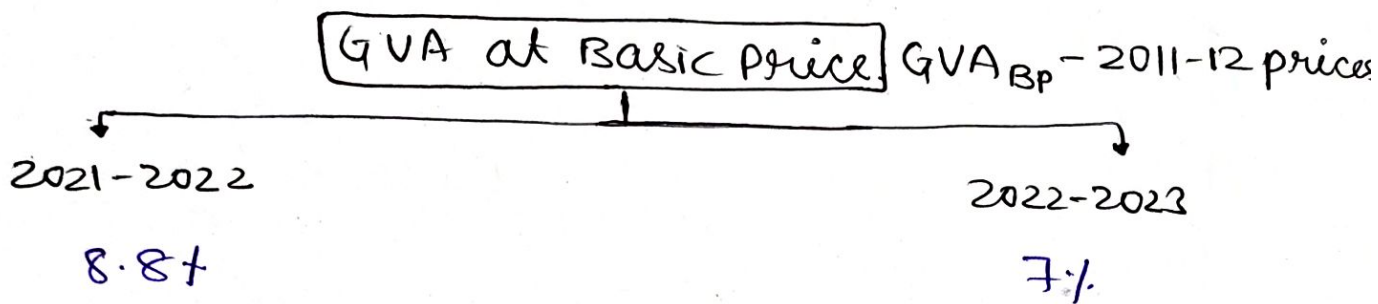
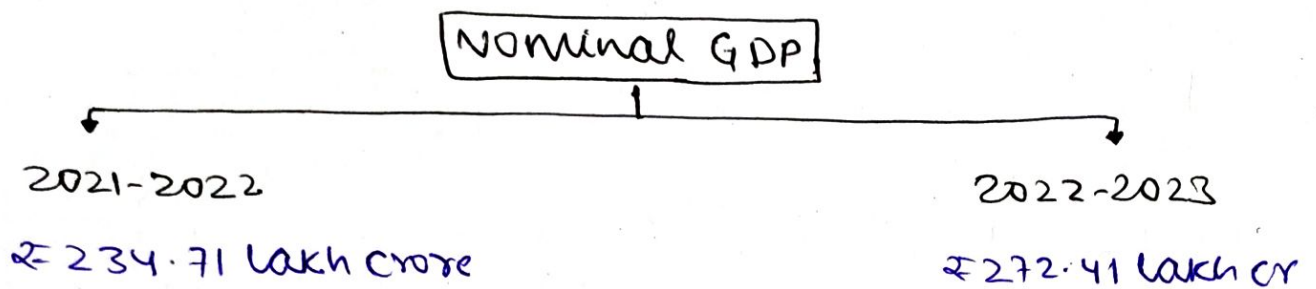
retirement pension is included in national income

- Household services.

National Income Estimates (2022-2023)

- 2022-2023 : Real GDP ₹160.06 lakh crore -
7.2% growth rate

2021-2022 : Real GDP ₹149.26 lakh crore



- 2022-2023 : Per Capital Income (PCI) - ₹1,72,276 cr

Percentage Change

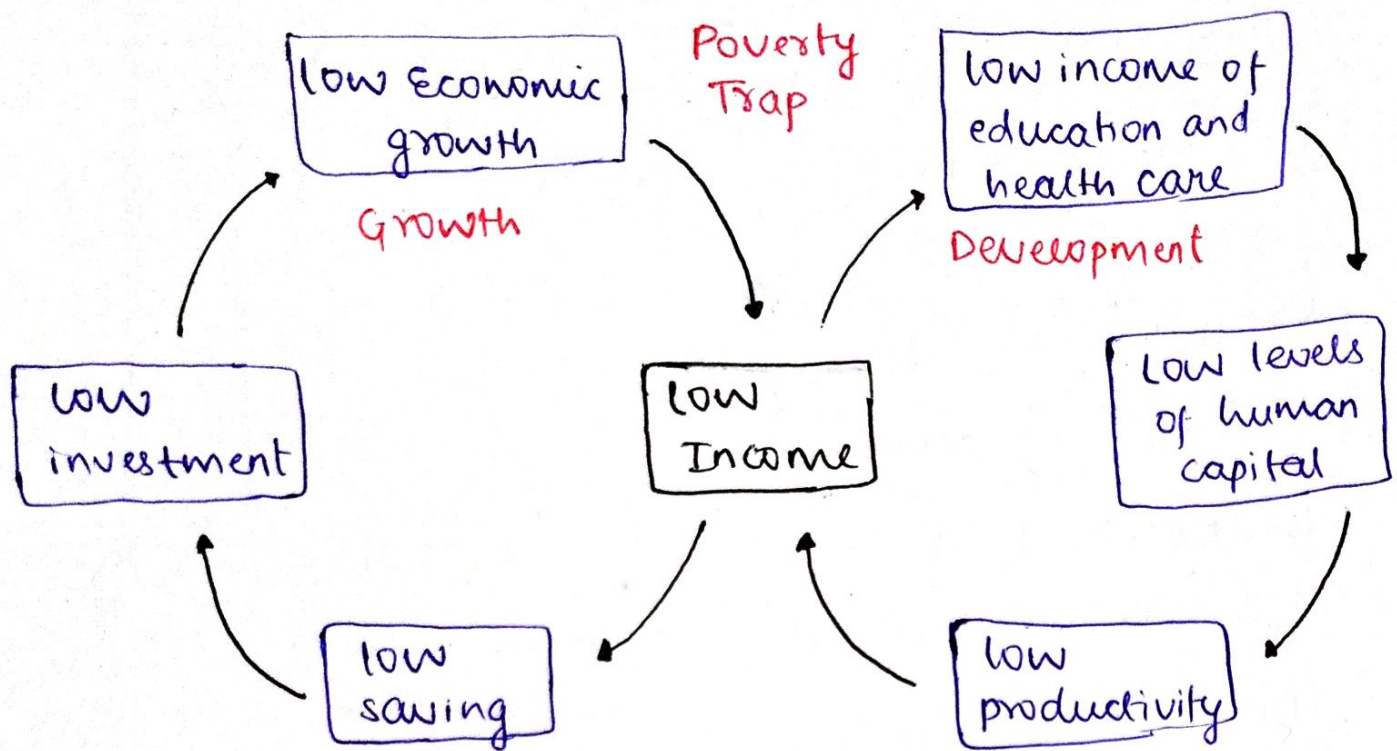
GVA_{BP} (2011-2012)

- Agriculture $\rightarrow$ 2021-2022 - 3.5%
 $\rightarrow$ 2022-2023 - 4%

percentage change in main indicators

Indicators	2021-2022	2022-2023
Production of Rice	5%.	4.1%.
production of coal	8.5%	14.8%
production of crude oil	-2.6%.	-1.7%.
production of cement	20.8	8.6
consumption of steel	11.4	13.2
Total telephone subscribers	-2.8	0.5
CPI General Index (Average)	5.5	6.7

Economic Development



Economic Development

- Economic development is defined as a sustained improvement in society's material well-being.
- Economic development encompasses a broader range of concepts than economic growth.
- Aside from national income growth, it includes social, political, and economic changes that contribute to material progress.

Economic Development

The process in which people in a country become wealthier, healthier, better educated and have greater access to good quality housing.

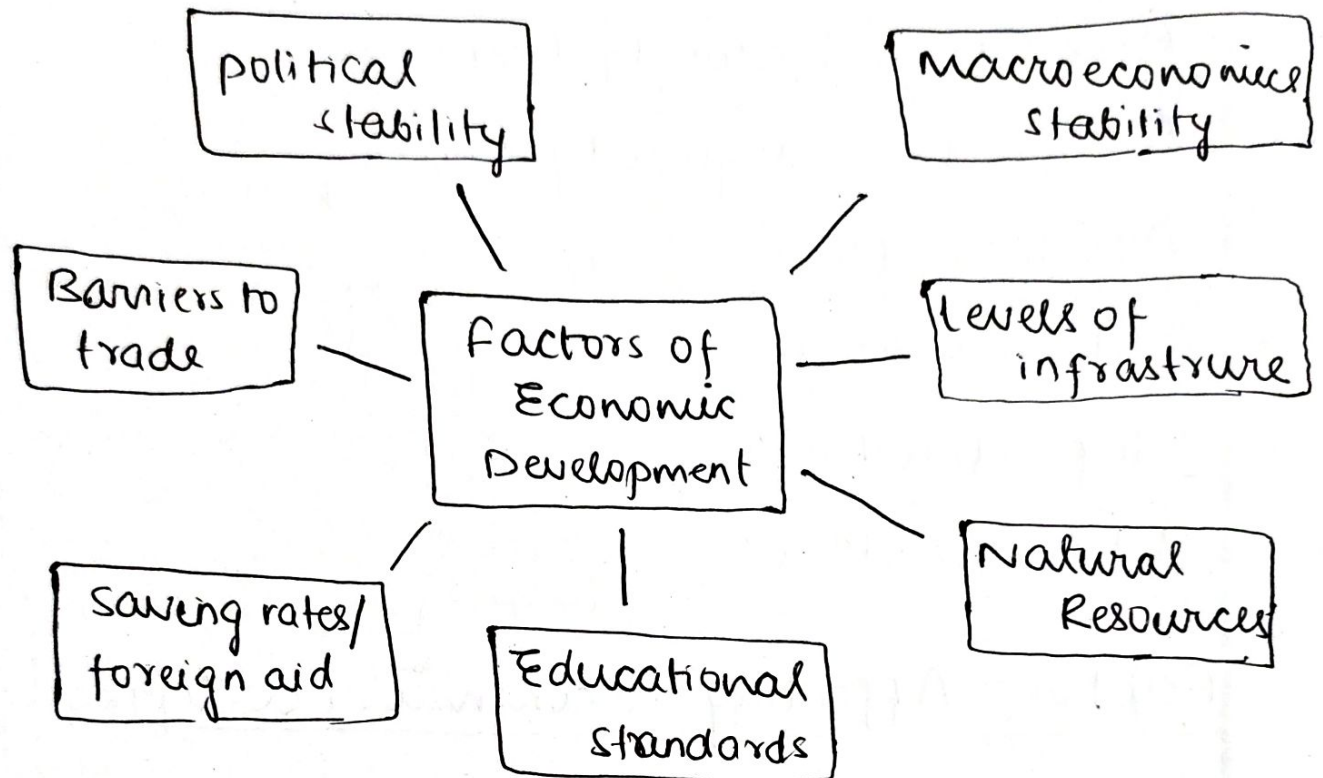
Features of Economic Development

- people shift from agriculture to industry, then service sector
- standard of living
- Access to good quality healthcare
- Access to good quality housing
- Academic level
- Internet access
- Infrastructure
- literacy rate

Factors Affecting Economic Development

- Infrastructural Development
- Education
- Increase in capital formation
- National Income and per capita Income
- purchasing power parity (PPP)
- Green GDP
- Human Development Index (HDI)
- political stability
- macroeconomic stability (inflation, fiscal policy, Employment level National Income, Global / International Trade).

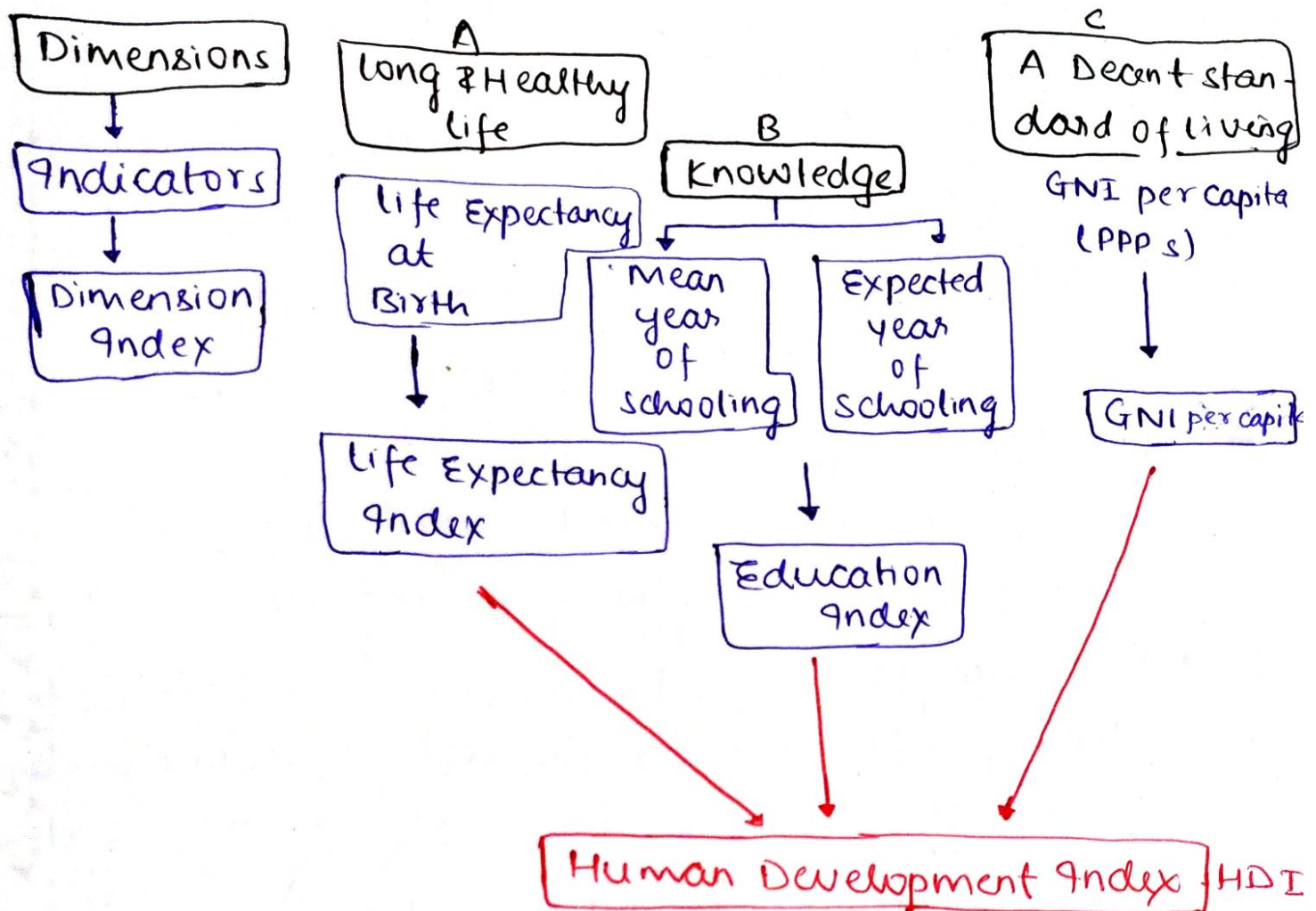
- Natural Resources
- Saving Rate/Foreign Investment
- Trade Barriers.



Measures of Economic Development

1. Human Development Index
2. Planetary Pressure Adjusted Index (PHDI)
3. Gender Development Index
4. Gender Employment Measure (GEM)
5. Gender Inequality Index
6. Inequality Adjusted HDI
7. Multi-Dimensional Poverty Index (MPI)
8. Physical Quality of Life Index (PQLI)
9. Global National Happiness Index (GNH)

Human Development Index



- The Human Development Index (HDI) measures the level and changes in quality of life
- mahbub ul Haq and Amartya sen, two renowned economists from Pakistan and India.
- Introduced by UNDP in 1990 and has been released annually ever since, except in 2012
- HDI value ranges from 0.000 to 1.000

(a) 0.000 - 0.4999 (low HM)

(b) $0.500 - 0.799$ (Medium HDI)

Human Development Report 2021-2022

- India's rank 132 out of 191 countries and 130 in the year 2021, behind Bangladesh (129) and Sri Lanka (123)
- India's latest HDI value of 0.633 (132) places the country in the medium Human Development category, lower than its value of 0.645 (120) in the 2020 category.
- Life expectancy: In 2021, India's life expectancy 69.7 to 67.2 years (global drop in life expectancy, down from 72.8 years in 2019 to 71.4 years in 2021)
- Schooling: Expected years of schooling at 11.9 yrs down from 12.2 years in the 2020 report, mean years of schooling at 6.7 yrs from 6.5 yrs in the 2020 report
- (The mean years of schooling for females declined from 12.6 to 11.9 years in the corresponding period.
- Gross National Income: The gross National Income per capita stood at USD 6,590

Among India's neighbours, Sri Lanka (73rd), China (79th) Bangladesh (129th) and Bhutan (127th) are ranked above India, while Pakistan (161st), Nepal (143rd) and Myanmar (149th) are worse off. The report said around 90% of countries registered a decline in their HDI value in 2020 or in 2021.

performers :

- These are Switzerland (1, 0.962), Norway (2, 0.961) Iceland (3, 0.959), Denmark (6, 0.948), Sweden

(7, 0.947), Ireland (8, 0.945), Germany (9, 0.942) and Netherlands (10, 0.941)

- The island nation was followed by Sri-Lanka (73 and 0.782), China (79 and 0.768), Bhutan (127 and 0.666), Bangladesh (129 and 0.661), India, Nepal (143 and 0.602) and Pakistan (161 and 0.544)

Planetary Pressures-Adjusted Human Development Index

Planetary Pressures-adjusted Human Development Index (PHDI)

Country (HDI rank)	India	World	China	Switzerland
PHDI	0.609	0.667	0.648	0.796
PHDI (vs HDI)	Falls by 4%	Falls by 9%	Falls by 16%	Falls by 17%

- The PHDI adjusts the standard HDI by a country's level of carbon dioxide emissions and material footprint, each on a per capita basis.
- India's Performance:
- India would move up 8 places in the ranking (123rd)
- Under the Paris Agreement, India pledged to reduce the emission intensity of its GDP from the 2005 level by 33-35% by 2030 and to obtain 40% of electric power capacity from non-fossil fuel

Sources by 2030.

- Solar capacity in India Increased: from 2.6 gigawatts in March 2014 to 30 gigawatt in July 2019, achieving its target of 20 gigawatts 4 years ahead of schedule.
- In 2019, India ranked 5th for installed solar capacity.
- The national solar mission aims to promote solar energy for power generation and other uses to make solar energy competitive with fossil-fuel-based options.

Gender Development Index

Gender Development Index

Country (HDI Rank)	India (#132)	World	China (#79)	Switzerland (#1)
GDI	0.849	0.958	0.984	0.967
GNI per capita for women (in 2017 PPPs)	2,277	12,241	13,980	54,597
GNI per capita for men (in 2017 PPPs)	10,633	21,210	10,893	79,453

- Introduced in Human Development Report 1995
- The GDI measures gender gaps in human development achievements by accounting for disparities b/w

women and men in 3 basic dimensions of human development - health, knowledge and living standards using the same component indicators as in the HDI

- The closer this ratio to 1, the smaller the gender gap b/w women and men in Human Development Index terms
- India's GDI stands at 0.849 which is significantly behind the world average of 0.958.
- The female life expectancy dropped from 71 years in the 2020 report to 68.8 years in the 2021 report
- From India's perspective, the key Human Development Index metric where women seem to lag behind men the most is the income per capita.

$$GDI = \text{female HDI} / \text{male HDI}$$

Gender Empowerment Measure (GEM)

- Introduced in 1995
- Developed by UNDP
- It measures Gender Inequality in 3 major dimensions
 - (a) political participation and Decision making
 - (b) Economic participation and Decision making
 - (c) power over Economic Resources.

Gender Inequality Index

- The GII is an inequality index released by UNDP. It measures gender inequalities in 3 important aspects of human development -

Reproductive Health

It is measured by maternal mortality ratio (number of maternal death due to birth or pregnancy per 100000 live births) and adolescent birth rates (The Annual Number of Birth to women 15 to 19 years of age per 1000 women);

Empowerment

Measured by proportion of parliamentary seats occupied by females and proportion of adult females and males aged 25 years and older with at least some secondary education; and

Economic status

It is expressed as labour market participation and measured by labour force participation rate of female and male populations aged 15 years and older.

Gender Inequality Index - 2021

- GII, India is at the 122nd rank out of 190 countries.
- India's GII stands at 0.490 (0.493 in 2020) which is slightly below the world average 0.465

India's performance is far below than China whose GII value is 0.192

Gender Inequality Index

Country (HDI rank)	India (#132)	World	China (#79)	Switzerland (#1)
Maternal mortality Ratio (deaths per 100,000 live births)	122	225	29	5
Adolescent birth rate (births per 1000 women ages 15-19)	17	43	11	2.2
Share of seats in parliament (% held by women)	13	26	25	40
Female pop ⁿ with at least some secondary education (% ages 25 and older)	42	64	78	97
Labour force participation rate (% ages 15 and older)	19	46	62	62
GI	0.490	0.465	0.192	0.018

Inequality Adjusted HDI

Country (HDI Rank)	India (#132)	World	China (#79)	Switzerland (#1)
what happens to HDI when adjusted for inequality	Fails by 25%	Fails by 19%	Fails by 15%	Fails by 7%
Income share held by poorest 40% of	20%	18%	17%	20%
Income share held by the richest 1%	22%	17%	14%	12%

- Introduced in 2010
- The IHDI indicates percentage loss in HDI due to inequality
- If there is no inequality, HDI will be equal to IHDI
- For India, the IHDI value for 2019 is 0.537.
- The report found that India's Human Development Index falls by 25%, when adjusted for inequality. It is higher than the global average of 19%.
- That's because the share of income held by the richest 1% of the population is more than the income held by the poorest 40%.

Multi-Dimensional Poverty Index (MPI)

- Introduced in 2010
- Released by UNDP (United Nations Development Programme) and the Oxford Poverty & Human Development Initiative (OPHI)
- The Index considers data from 109 countries and 5.9 billion people.
- A person is multidimensionally poor if she/he is deprived in one third or more (means 33% or more) of the weighted indicators (out of the 10 indicators). Those who are deprived in one half or more of the weighted indicators are considered living in extreme multidimensional poverty.

Global Multidimensional Poverty Index (MPI) 2022

- 1.2 billion people are multidimensionally poor
- Nearly half of them live in severe poverty
- Half of poor people (593 million) are children under age 18
- The number of poor people is highest in sub-Saharan Africa (579 million), followed by South Asia (385 million). The two regions together are home to 83% of poor ppl

Global Multidimensional Poverty Index, 2023

- multidimensional poor - 1.2 Billion (18% of total ppl) out of 6.1 Billion people
- Maximum Poverty
 - (a) Sub-Saharan Africa - 534 million
 - (b) South Asia (389 million)

} 5 out of 6 ppl are poor

- Children (under 18 years): 566 million are multi-dimensional poor (27.7%).
- Adult : 13.4%.

Vulnerable poor

Those who are deprived of (20-33.3%) of all indicators.

Global multidimensional poverty Index (MPI) & India

- India has by far the largest number of poor people worldwide at 22.8 cr, followed by Nigeria at 9.6 cr.
- The incidence of poverty fell from 55.1% in 2005/06 to 16.4% in 2019-21 in the country.
- As many as 41.5 cr people moved out of poverty in India during the 15 year period b/w 2005-06 and 2019-21.
- Performance of States:
 - (a) Bihar, the poorest state in 2015-16, saw the fastest reduction in MPI value in absolute terms.
 - (i) The percentage of poor in Bihar fell from 77.4% in 2005-06 to 52.4% in 2015-16 and further to 34.7% in 2019-2021.
 - (b) However, in relative terms, the poorest states have not quite caught up.
 - (i) of the 10 poorest state in 2015/2016, only one (West Bengal) have emerged out of the list in 2019-21.

(ii) The rest (Bihar, Jharkhand, Meghalaya, Madhya Pradesh, Uttar Pradesh, Assam, Odisha, Chhattisgarh and Rajasthan) remain among the 10 poorest.

(c) Across states and union territories in India, the fastest reduction in relative terms was in Goa, followed by Jammu and Kashmir, Andhra Pradesh, Chhattisgarh and Rajasthan.

Global MPI and India: 415 million ppl out of poverty.

5. Reduction of poverty Region wise:

a) The incidence of poverty fell from 36.6% in 2015-16 to 21.2% in 2019-2021 in rural areas and from 9% to 5.5% in urban areas.

3 Dimensions of poverty

Health (1/3)	Education (1/3)	Living of standard (1/3)
Nutrition child mortality (1/6)	Years of schooling School attendance (1/6)	Cooking fuel Sanitation Drinking water Electricity Housing Assets (1/18)

National multidimensional poverty index: NITI Aayog

- 12 indicators (Health - Antinatal care and living Standard - Bank Account)

- Bihar has the highest proportion of people of the state's population followed by Jharkhand and Uttar Pradesh who are multidimensionally poor.
- Kerala registered the lowest population poverty levels, followed by Puducherry, Lakshadweep, Goa and Sikkim.

National Multidimensional Poverty Index (2023)

- NMPI was 1st released in 2021
- NMPI (2023): 2nd Edition
- Dimensions = 3, Indicator = 12
- 13.5 cr people - moved out of multidimensional poverty.

Multidimensional poverty

2015-2016

24.85%

2019-2021

14.96%

Rural poverty

2015-2016

32.59%

2019-2021

19.28%

Urban poverty

2015-2016

8.65%

2019-2021

5.27%

Physical Quality of life Index (PQLI)

- The physical quality of life index (PQLI) was developed for overseas Development Council in the mid-1970s by Morris David.
- The Physical Quality of life Index measures the quality of life or well-being of a country based on 3 variables:
 - (a) basic literacy rate
 - (b) infant mortality
 - (c) life expectancy at age one

Global National Happiness Index (GNH)

- Gross National Happiness is a term coined by His Majesty the Fourth King of Bhutan, Jigme Singye Wangchuck in the 1970s.
- Gross National Happiness (GNH) measures economic and moral progress as an alternative to gross domestic product measurement in Bhutan.
- The concept implies that sustainable development should take a holistic approach towards notions of progress and give equal importance to non-economic aspects of well-being.
- In 2012, for the 1st time world Happiness Report was released by United Nations Sustainable Development

Solutions network based on Gross Happiness Index at global level.

- The report usually ranks 150 countries
- It is based on several factors such as real GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity and perceptions of corruption.
- International Happiness Day - 20th March

World Happiness Report 2022

- This year, the report ranked 146 countries
- India saw a marginal improvement in its ranking, jumping 3 spots to 136 from 139 a year ago.
- Finland has been named the world's happiest country for the fifth year running followed by Denmark.
- Afghanistan was ranked as the unhappiest nation, followed by Lebanon, Zimbabwe, Rwanda and Botswana, respectively.

Global Gender Gap Index 2022

4 Key Dimensions:

- Economic participation and opportunity
- Educational Attainment
- Health and survival
- political Empowerment

Human Development Index

Mean year of schooling: It is the average number of completed years of Education of a countries population aged 25 years and older, excluding years spend repeating individuals grade.

Expected years of schooling: It is the number of years during which a 2 years old child can expect to spend in schooling based on the school enrolment rates at a given date.

These expected years are calculated as the sum of enrolment rate observed at the different ages from 2-24 years old.

Green GDP

$$\left[\text{Green GDP} = \text{GDP} - \text{Environmental degradation due to the production} \right]$$

It is measured the growth of an economy by subtracting the cost of Environmental damages and ecological degradation from the GDP.

It was originated by system of National Account (SNA).

The Gender Score

India ranked 135 in gender parity out of 146 countries, according to the Global Gender Gap Report 2022 released by the World Economic Forum. A look at India's ranking in the four sub-indexes based on which the overall ranking was determined.

India	Rank 2022
Global Gender Gap Index	135
Economic participation and opportunity	143
Educational attainment	107
Health and survival	146
political empowerment	48

Out of 146 countries.

- World Economic Forum (WEF) ranked India at 135 out of 146 countries in its Global Gender Gap (GGG) Index for 2022.
- India's overall score has improved from 0.625 (in 2021) to 0.629, which is its 7th highest score in the last 16 years.
- In 2021, India was ranked 140 out of 156 countries.

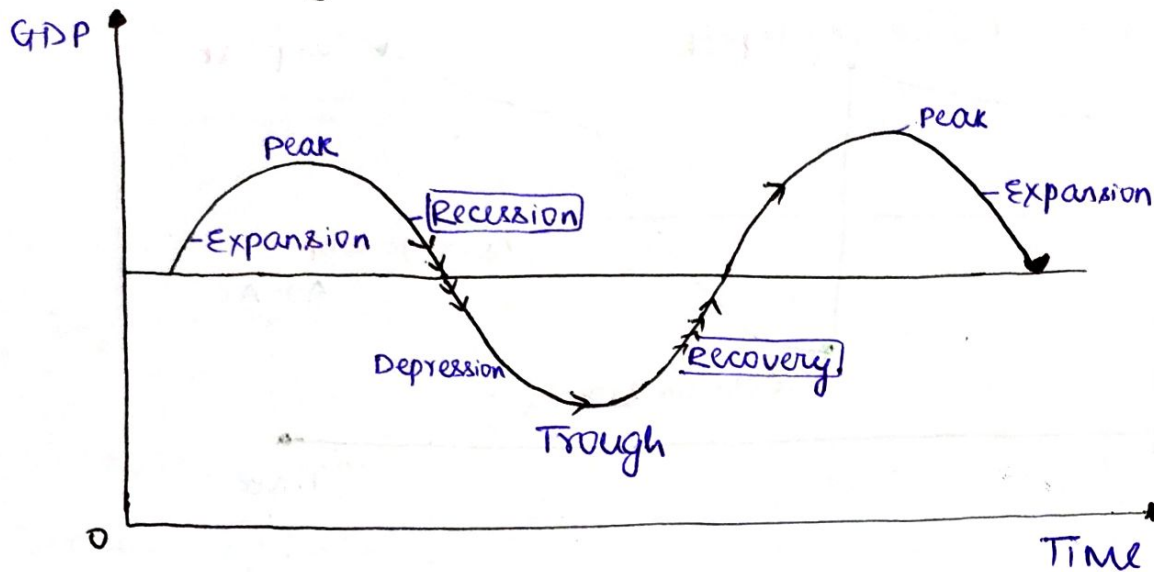
The gender gap is the difference b/w women and men as reflected in social, political, intellectual cultural or economic attainments or attitudes.

INDIA'S RANK

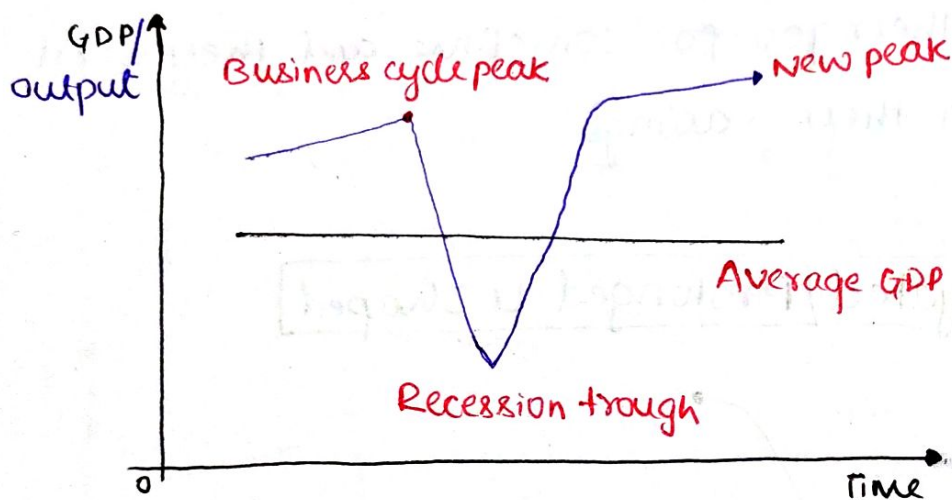
Index/subindex	2022 (146 count)		2021 (156 count)	
	Rank	Score	Rank	Score
Global Gender Gap Index	135	0.629	140	0.625
political empowerment	48	0.267	51	0.276
Economic participation	143	0.650	151	0.626
Educational attainment	107	0.961	114	0.962
Health and survival	146	0.937	155	0.937

Types of shapes of Economy

Business cycle

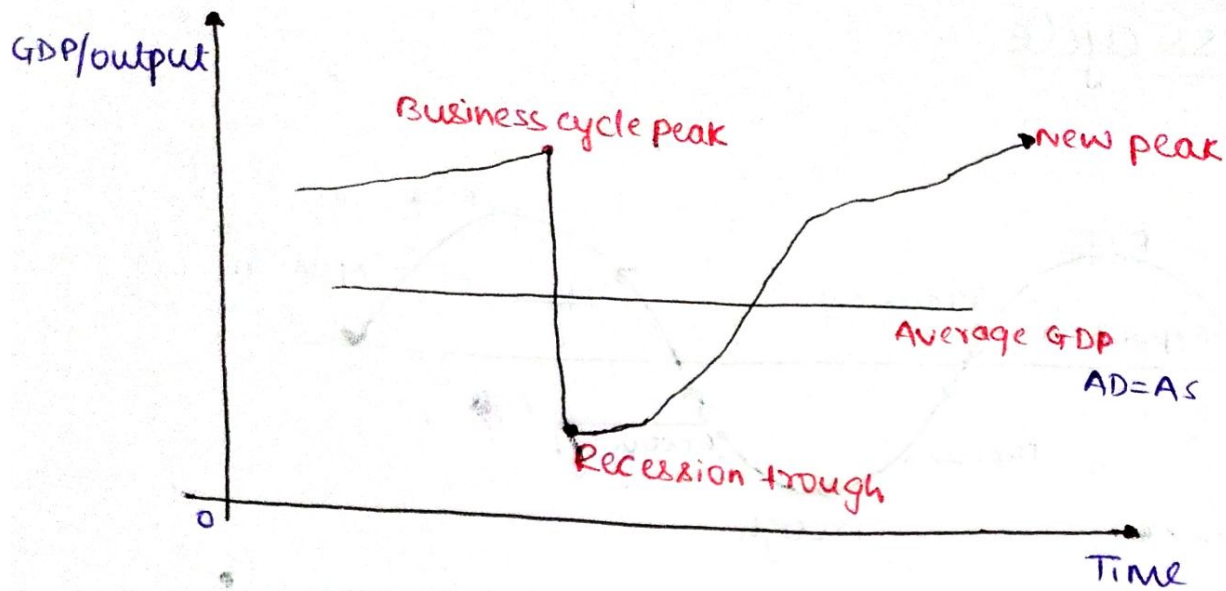


V-shaped Economy



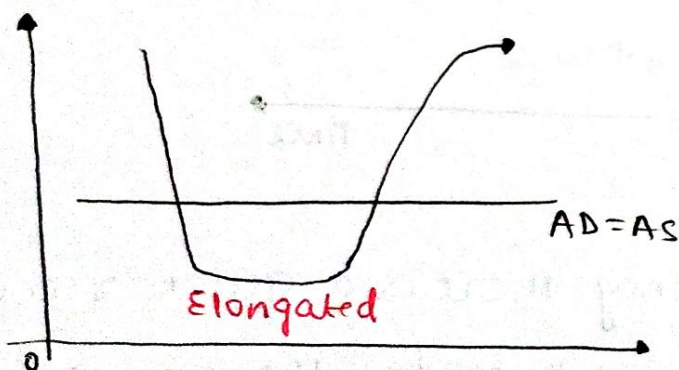
- In V-shaped Economy there is a quick recovery and again an Economy goes back to the normal shape.
- Income and jobs are not permanently lost as the Economy recovers sharply.

U-shaped Economy

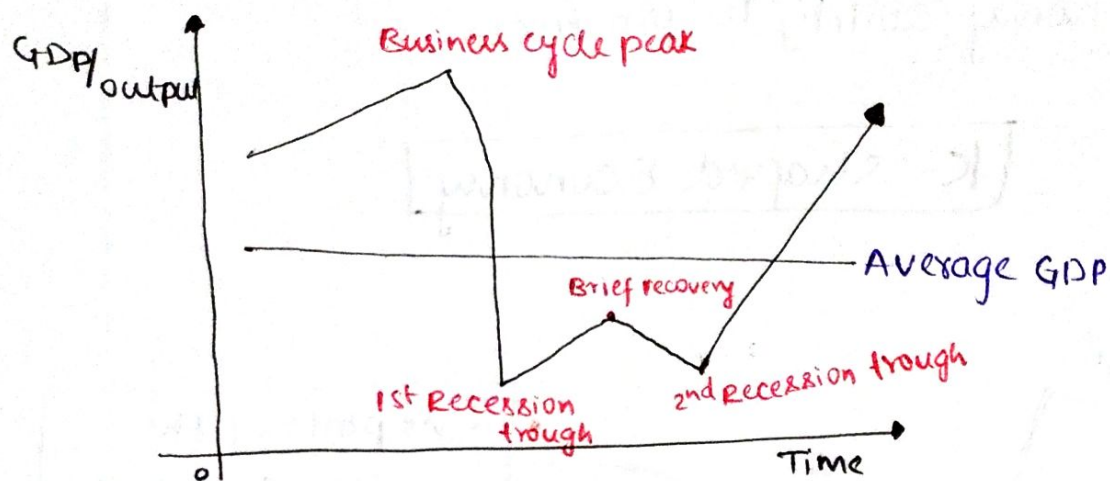


- After falling, an economy struggles around a low growth rate for sometime before rising gradually to usual shape.
- People lost their job for sometime and they start depending on their savings.

Elongated/Prolonged U shaped

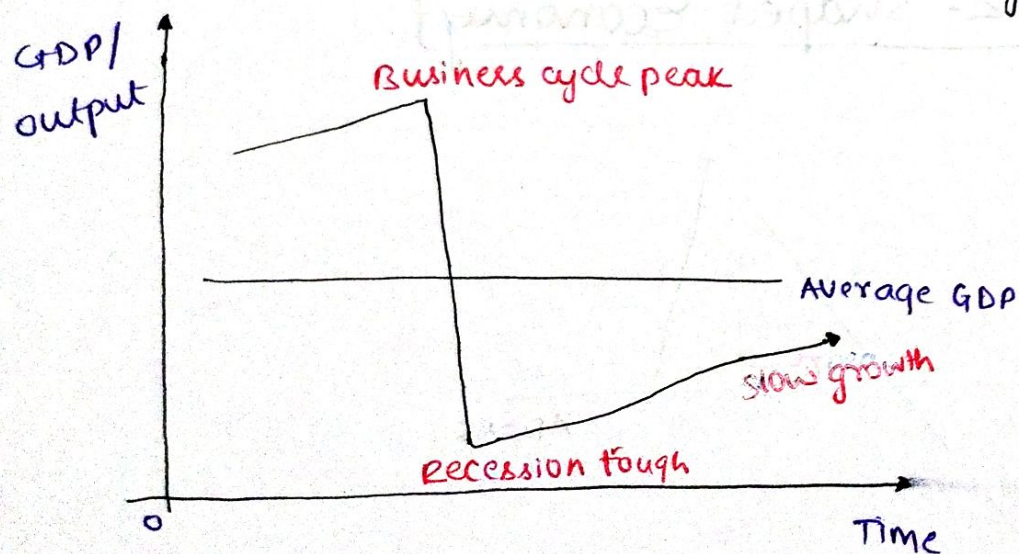


W- Shaped Economy



- In this, an Economy comes into recession and then recovers up to a small level then falls again and then recovers sharply
- It is also called "Double-Dip Recession"
- India suffered double-dip recession during 2nd wave of the COVID

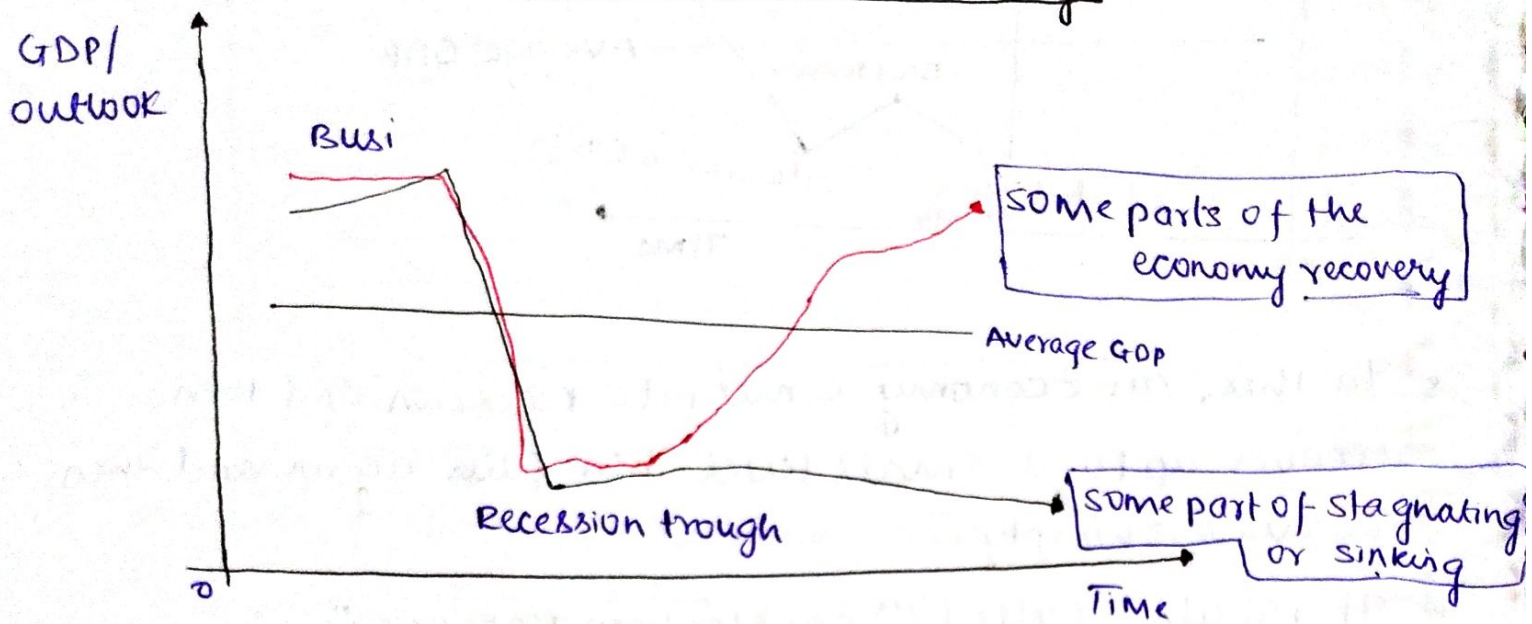
L- shaped Economy



- When Economy falls but does not able to get back at their early stages.

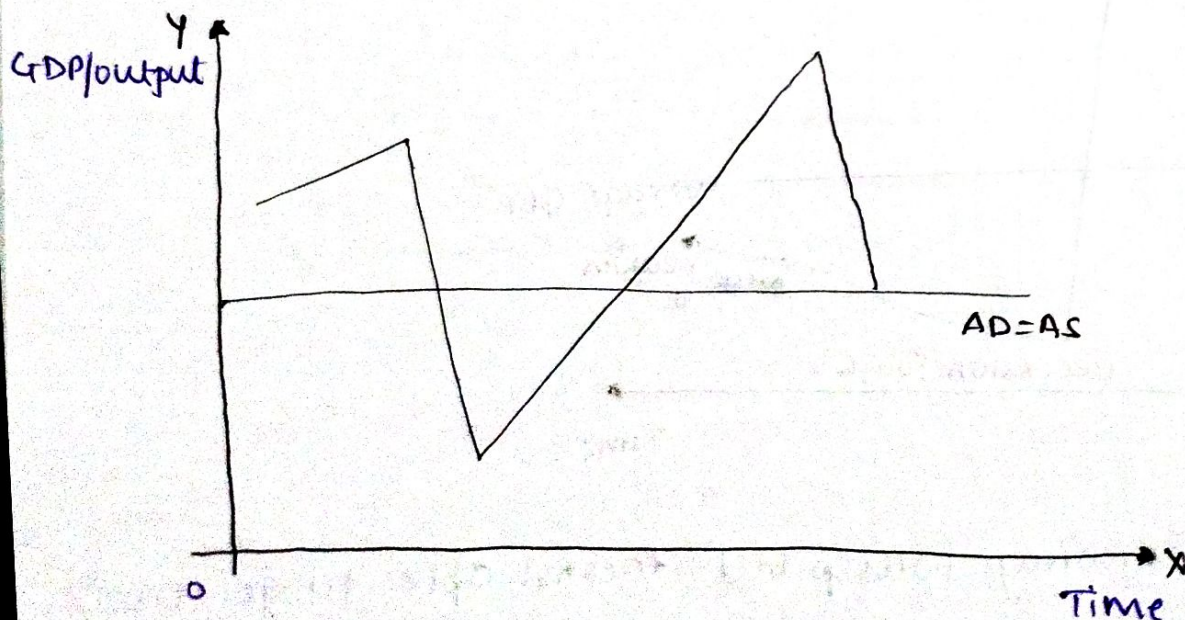
In this phenomenon, there is permanent loss to the economy ability to produce.

K-shaped Economy



- It occurs when after recession some sectors of the Economy start performing well and some sector remain in recession.

Z-shaped Economy



- It is the most or highly optimistic condition of the Economy in which the economy quickly rises after an Economic crash.