

2

Chapter: 6 National Income

↳ Includes 2 units

→ Unit 1 :- Macro economic aggregates and Measurement of National Income.

⇒ Unit 2 :- The Keynesian Theory of Determination of National Income.

Average weightage : 15 marks



Unit: 1→ National Income - Basics

→ The Performance of an economy depends on the output of goods and services produced by it, which is measured by "National Income."

→ National Income is defined as the:

→ net value of

→ all economic goods and services

→ produced

→ within the domestic territory of a country

→ in an accounting year

→ plus the net factor income from abroad.

→ According to the

↳ Central Statistical Org. [CSO]

→ "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 of } National Income Estimates
Significance of }

- 1) It Provides a Framework for analyzing the short-run performance.
- 2) The distribution pattern of national income helps businesses to forecast future demand.
- 3) Economic welfare depends on magnitude and distribution of national income.
- 4) N.I. shows composition and structure of N.I. of different sectors and variations in them. It helps to make comparisons of trend and speed of development.
- 5) Provides quantitative basis for assessing, choosing & evaluating economic policies.

→ Definition of National Resident should be written here. [given at the end of this unit]

- Distinguish between Non-economic and Economic activities.

1) Economic Activities:

- Goods and services that can be Purchased / Exchanged with money.

2) Non Economic Activity:

- These activities are those which produce goods and services but are not for exchange in market.

ଉତ୍ପାଦନ କରିବା କିନ୍ତୁ ଏହା ବ୍ୟବସାୟ ସମ୍ପର୍କ ନା ରଖା ଯାଏ

→ The Final Product → Two types - Consumer goods and Producer goods

1. Consumer goods:- where the goods and services are used for final consumption by the consumer, it is called as consumer goods and services.

ie TV, Foods, Home Appliances

→ Producer goods is definition କାର୍ଯ୍ୟ କରିବା ପାଇଁ ଆବଶ୍ୟକ ଉପକରଣ ଏବଂ ସାମଗ୍ରୀ ହୁଏ.

→ Flow Measure

- N.I. and GDP is a 'Flow' measure of output per time period and includes only those G/Ls produced in current period

→ Exclusive from G.D.P

→ (a) Transfer Payments:

Government making a payment without goods or services being received in return.

- E.g.
- Social Security Benefits
 - Unemployment Compensation

→ (b) Financial Transactions:

stocks and bonds which are exchanged during the period are not included. do not directly involve current production however value of services that a company sell and purchase is included.

7

→ Real GDP :-

→ Real GDP or GDP at Constant Price refers to the total money value of the final goods and services produced within the Domestic Territory of a country during an economic accounting year. Estimated using base price.

→ It is an inflation adjusted measure.

→ It is not affected by changes in price.

→ It changes only when there is change in the amount of output produced in the economy.

→ Real GDP is a better measure of economic well being as it shows the true picture of the change in production of an economy.

→ Nominal GDP:-

→ Nominal GDP or GDP at current price. - GDP estimated on basis of current year's market prices, it is called.

→ Nominal GDP changes from year to year because of two reasons.

1) The amount of goods and services produced changes. and

2) when market price change. changes in GDP due to change in prices fail to correctly explain performance of economy.

* GDP Deflator:-

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

$$\text{Inflation Rate} = \frac{\text{GDP Deflator in year 2} - \text{GDP Deflator in year 1}}{\text{GDP Deflator in year 1}} \times 100$$

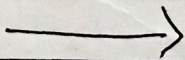
Q

→ Domestic Vs National :-

→ The term 'National' Refers to Normal Residents of a Country who may be within or outside the domestic territory of a country and is a broader concept compared to 'domestic'

→ The term 'domestic' refers to production done by people within the domestic territory.

→ it doesn't include International Institutes and Foreign embassies located within geographical territory. Includes embassies of this country situated outside India.



	GDP	GMP
1. Earnings from production in India that accrue to Foreign Resident or Foreign owned firms	Included	Excluded
2. Profits earned in India by X company. Foreign owned firm.	Included	Excluded
3. Earnings of Indian corporations overseas	Excluded	Included
4. Earnings of Indian Residents working overseas.	Excluded	Included
5. Profits earned by company Y. an Indian company in UK.	Excluded	Included

→ Net Factor Income From Abroad
[N.F.I.A]

Factor Income earned by domestic factors of production employed in Rest of the world.

Factor Income earned by factors of production of Rest of world employed in domestic territory

~~→~~

→ Operating Surplus

Income from Property + Income from Entrepreneurship

or

Rent + Interest + Profit

→ Market Value vs Factor Cost

$$MP = FC + \text{Indirect tax} - \text{Subsidy}$$

or

$$MP = FC + \text{Net Indirect tax}$$

Gross Domestic Product at Factor cost [GDP FC]
 = GDP MP = Indirect tax + Subsidies

- or
- + Compensation of employees
 - + operating surplus (rent + Interest + Profit)
 - + mixed ^{Income} economy of self-employed.
 - + Depreciation

→ Mixed ^{Income} economy of self-employed

→ Difficult to separate labour income from capital income when people provide both labour and self capital reserve.
 eg:- self-employed like lawyers, engineers, proprietors etc.

* GDP Per capita

- Measure of country's economic output per person.
- Indicator of the standard of living of a country.
- $GDP \text{ Per capita} = \frac{\text{Real GDP}}{\text{Total Population}}$

Net domestic Product of Factor cost - [NDP_{FC}]
[AKA - Domestic Income or Factor Income
Earned in domestic Territory]

= NDP_{MP} - Indirect Taxes + subsidies

= NDP_{MP} = Net Indirect Taxes
or

- = Compensation of employees
- + Operating surplus (rent + Interest + Profit)
- + Mixed Income of self-employed.

-> National Income (NNP_{FC})

FI earned in domestic Territory (FID) +
NFIA

or

NDP_{FC} + NFIA

Full Form at Page 16

Total 8 aggregates

- | | |
|--------------|--------------|
| 1) GDP at MP | 5) GNP at MP |
| 2) GDP at FC | 6) GNP at FC |
| 3) NDP at MP | 7) NNP at MP |
| 4) NDP at FC | 8) NNP at FC |

* National Product at Market Price and National Product at Factor cost

1) Factor cost refers to Factor Payment made by the business to the owner of factor of production in the form of rent, wages, interest and profit.

2) National Product at Market Price = National Product at Factor cost + Indirect tax - subsidies or

3) National Product at M.P. = National Product at F.C. + Net Indirect tax.

* Factor cost vis Basic Price vis market Price

1) Factor cost = SUM total of Factor Income in form of Rent, wages, Interest and Profit.

2) Base Price = Factor cost + Production tax - Production Subsidies

(- Production Tax :- License stamp duty, Munciple tax, Property tax)

3) Market Price = base Price + Product tax - Product Subsidy

(Product tax = Indirect tax (GST))
[GST = Goods and Service Tax]

4) Market Price = Basic Price + Product tax - Product Subsidy = Market Price

5) $MP = FC + \text{Net Indirect tax}$ (when Production tax and Production subsidies are not given)

★ → GROSS vs Net *

→ Net domestic Product = Gross domestic Product - Depreciation

→ Net National Product = Gross National Product - Depreciation

1) GDP at MP

↳ Gross Domestic Product at Market Price = GDP^{MP}

2) ~~GDP at FC~~

↳ ~~Gross Domestic Product~~

3) ~~GNP at FC~~ [Net. = National]

↳ Gross Net. Product at Factory Cost = GDP^{FC}

2) NDP at MP

↳ Net Domestic Product at Market Price = NDP^{MP}

4) NDP at FC

↳ Net Domestic Product at
Factory Cost = NDP^{FC}

5) GMP at MP

↳ Gross Net Product at
market Price = GMP^{MP}

6) GDP at FC

↳ Gross Domestic Product at
Factory Cost = GDP^{FC}

7) NDP at FC

↳ Net National Product at
Product = NDP^{FC}

8) NDP at MP

↳ Net National Product at
market Price = NDP^{MP}

→ Net Factor Income FROM Abroad (NFIA)

* 3 Golden Rules of N.I.

1) Gross - Depreciation = Net

2) $MP = FC + IOT - \text{Subsidy}$
or

$MP = FC + NIT$

3) Domestic + NFIA = National Income

* Indirect Taxes and Subsidies

1) Production Taxes & Production Subsidies

⊙ These are Independent of the Volume of actual Production

2) Product Taxes & Product Subsidies

Paid or received on Per unit of Product.

→ Basic Price

=	Factor Price
+	Production Taxes
-	Production Subsidy

→ Market Price

=	Basic Price
+	Product Taxes
-	Product Subsidies

* Types of Income:

↳ Society 😊

* Domestic Income [NDP_{FC}]

↳ Has 2 Parts

Part - 1 : Income from domestic Product Accruing to the Public Sector -

- Income from P/E accruing to govt admin dep. + savings of non dep enterprises.
- where, Departmental enterprises includes Railways, post & telegraph etc.
- Non-Departmental enterprises includes
 - IOCL, GAIL, LIC

Part 2: Income from Domestic Product
 according to Private Sector
 = NDPFC - Inc. From P/E according
 to govt. admin dep - saving or
 Non dependent.

* Personal Income:

→ Income received by household sector
 including Non-Profit Institutions serving
 households from all sources.

→ Personal Income Formulas

→ Basic Formulas

-	National Income
-	income earned but not received
+	income recd but not earned,

-> P.I. (2nd Formula)

- = National Income
- undistributed Profit
- Net Interest Payments made by households
- Corporate Tax
- + TRF pay to households

-> P.T (3rd Formula)

- = National Income
- Income from Prof & enterprises accruing to gov. departments
- Saving of non-debt ent
- saving of private companies
- Corporate Profit tax
- + National debt Interest
- + Current Transfers from government and Row

-> P.I. (4th Formula)

- = Private Income
- + undistributed Profits
- Corporate Tax

* Private Income:-

→ it is measure of the income [both Factor income and Transfer Income] which accrue to Private Sector from all sources within and outside the country.

* Private Income Formula

	Private Income
=	Income from domestic Product according to Private Sector
+	Net Factor Income from abroad
+	National debt interest
+	current transfers from government & rest of world

* Disposable Personal Income (DI)

→ it is a measure of amount of money in the hands of the individuals that is available for their consumption or savings.

→ $DI = \text{Personal Income} - \text{Personal Income tax} - \text{New tax payment}$

* Circular Flow of Income:

→ Circular flow of income refers to the continuous circulation of production, income generation and expenditure involving different sectors of economy.

* Total 3 Phases

→ Production Phase

↳ Firms produce G/S with help of factor service.

→ Income or distribution Phase

↳ The flow of factor incomes in the form of rent, wages, interest and profits from firms to the households occurs.

→ Exp. or Disposition Phase

↳ Income received by factors is spent on consumption of G/S and investment goods. This exp. leads to further production of G/S and sustains circular flow.

* Methods of calculating National Income

(I) Production method (or Value Added method)

→ Identify the producing enterprises in to three sectors.

→ Primary Sectors

→ Secondary Sector

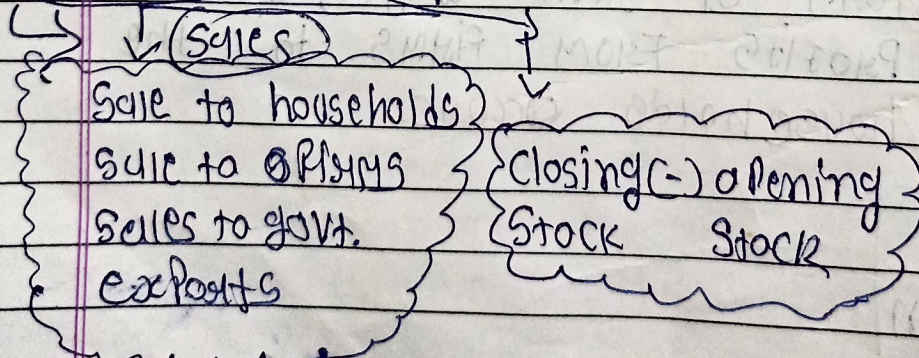
→ Tertiary Sector

or
Service Sector

→ calculate GVAMP of each other

Gross Value added (GVAMP) = Value of output (-) intermediate consumption

(Sales + D. Stock)



Inventory Investments

=> Calculate = GDP_{MP} = EQVA_{MP}

=> National Income = GDP_{MP} (-) Depreciation
NNP_{FC} (+) NFIA (-) Net Indirect tax

=> NDP_{FC} + NFIA = NNP_{FC}

-> 218 214 218 214

(II) Income method

=> Domestic method = Compensation + of employees + operating surplus + mixed income of self employed

=> National Income [NNP_{FC}] = Domestic Income [NDP_{FC}] + NFIA

iv

(II) ~~Income Method~~

→ Domestic

(III) Expenditure method:

→ $GDP_{MP} = \text{Final Consumption} + \text{Gross domestic expenditure} + \text{Capital formation} + \text{Net exports}$

or

→ $GDP_{MP} = \sum \text{Final Expenditures} = C + I + G + (X - M)$

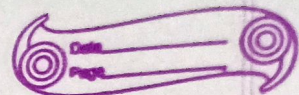
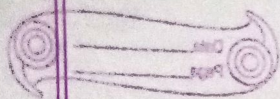
$\text{Net exports} = \text{Exports} - \text{Imports}$

* GDP and Welfare

-> Can The GDP of a Country be taken as an Index of The welfare of People in That Country ?

Answer No, since GDP measures Exclude The Following which are critical For the overall wellbeing of citizens,

- a) Income Distribution
- b) Quality Improvements in systems and Processes due to Technological as well as managerial Innovation
- c) Production hidden from govt. either they are evading taxes or because it is illegal (drugs, gambling)
- d) Non-market Production and Non-economic contributors to well-being For Examples; health of a country's citizens education level etc.
- e) Economic 'bads' For Example: crime, Pollution, Traffic Congestion etc
- f) Volunteer work Rendered without remuneration.
- g) Many thing that contribute to our economic welfare such as, leisure time, Fairness, gender equality, Security of community feeling etc.



* Limitations And challenges of N.I. *

→ Conceptual Difficulties

- 1) Lack of an agreed definition of National Income.
- 2) Accurate distinction between Final and Intermediate goods.
- 3) Issue of Transfer Payments.
- 4) Difficulty of Incorporating distribution of Income.
- 5) Valuation of a new good at constant prices.

- Now,

→ Challenges

- 1) Inadequacy of data and Lack of reliability of Available data.
- 2) Absence of Recording of Incomes due to illiteracy and Ignorance.
- 3) Lack of Proper Occupational Classification And,
- 4) Accurate Estimation of consumption of Fixed Capital.
- 5) Production For self-consumption.