

Chapter - 3

National Income and related aggregates

→ Domestic Territory

- * Geographical / economic territory
- * Administered by govt.
- * People, goods and services, and money circulate, move freely
- * Political frontiers of a country

Also includes :-

- 1) Aircrafts, ships operated & owned by normal residents of a country, between 2 or more countries
 e.g. Air India operated, between Russia & China

↓
 operated by Indian Co. [will come in domestic territory of India]
 e.g. Plane of USA flying between India & China
 ↓
 owned by USA [will come under domestic territory of USA]

- 2) Fishing vessels, oil, natural gas rigs (containers) & floating platforms operated by India in international waters. [will come under domestic territory of India]

- 3) Embassies, Consulates, military force office

e.g.

USA
India

 → USA embassy in India [Domestic territory of USA]

Indian embassy in USA [Domestic Territory of India]

Similarly, India's consulate in USA → Domestic Territory of India

→ Normal Residents

* An individual / institution which / who

(i) Ordinarily resides in the country.

residing in a country for a period of more than one year.

(ii) whose economic interest lies in that country [earning, spending, saving in that country]

→ Who are not included in Normal residents?

1. Foreign tourists, visitors
2. Foreign staff of embassies, officials and members of armed forces
3. Employees of International organisations (IMF, WHO, UNO, World Bank) considered as normal residents of country they belong to
4. Border workers

Q. Which of the following are normal residents of India?

- 1) Indian officials working in Indian Embassy in USA [Yes]
- 2) A Japanese tourist who stays in India for 2 months [No]
- 3) Indians working in the UNO office, located in USA for less than 1 year [Yes]

- 4) Indian muslims going for Haj pilgrimage [Yes]
- 5) Australian visited Taj Mahal for a month. [No]

Q: Which of these are covered under Domestic territory of India

1. An Indian Co. in London [No] → because it doesn't lie within political frontiers of India.
2. Microsoft Office in India. [Yes]
3. Office of Reliance Industries in New York [No]
4. Indian Embassy in Japan [Yes]
5. Russian Embassy in India. [No]
6. Tata rented its building to Google in USA. [No]
7. Branch of State Bank of India in China [No]

→ Domestic Income [NDP_{FC}]

* Sum total of factor incomes [Rent, Wages, Interest, Profit]
Also called compensation of employees

- * generated within domestic territory of a country
- * by residents as well as non-residents of a country
- * during an accounting year.

→ National Income [NNP_{FC}]

- * Sum total of factor incomes
- * earned by normal residents of a country
- * during an accounting year.
- * Can be generated within domestic territory or outside.

National income = Domestic income + Net Factor Income from Abroad (NFIA)

NFIA = Factor income earned from Abroad - Factor income paid abroad.

→ 'Factor income from abroad' is the income earned by normal residents of a country from ROW.

→ 'Factor income to abroad' → factor income paid to normal residents of other countries for their factor services within domestic territory.

→ NFIA can be positive, negative or zero

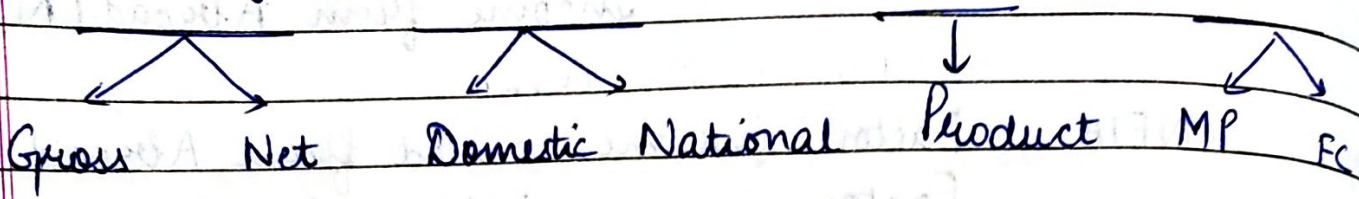
- NFIA +ve when income earned from abroad is more than income paid to abroad.
- NFIA -ve when income from abroad < income paid abroad
- NFIA zero when income from abroad = income paid abroad.

→ Domestic income = Domestic Product

Similarly, national income = national product

Reason:- All production is ultimately converted into factor incomes.

8 aggregates of National income.



1. Gross Domestic Product at Market Price [GDP_{MP}]
 Market value of all final goods and services produced within domestic territory of a country, during an accounting year, inclusive of depreciation.

2. Net domestic product at MP [NDP_{MP}]
 ↔ same as ① ↔, exclusive of depreciation.

3. Gross National product at MP [GNP_{MP}]

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

4. Net National Product at MP [NNP_{MP}]

$$NNP_{MP} = NDP_{MP} + NFIA$$

5. Gross Domestic Product at Factor Cost [GDP_{FC}]
 Sum total of factor cost incurred on production of final goods and services within the domestic territory of a country, during an accounting year, inclusive of depreciation.

6. Net domestic Product at Factor Cost [NDP_{FC}]
 * Also called domestic income / domestic factor income.

* Sum total of factor cost incurred on production of final goods and services within domestic

territory during an accounting year.

$$NDP_{FC} = \text{Compensation of employees or Wages} + \text{Rent} + \text{Interest} + \text{Profit}$$

7. Gross National Product at FC (GNP_{FC})

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

Sum total of GDP_{FC} and $NFIA$

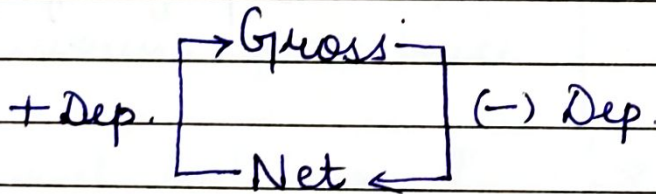
8. Net National Product at Factor Cost (NNP_{FC})

* Sum of domestic income and $NFIA$

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

Calculation of Aggregates

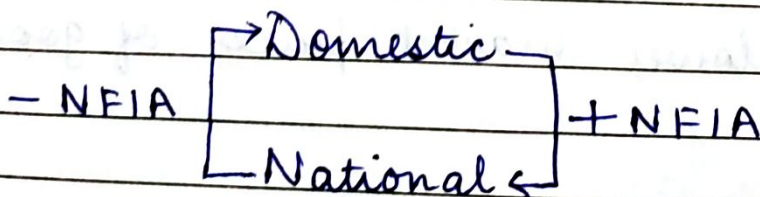
①

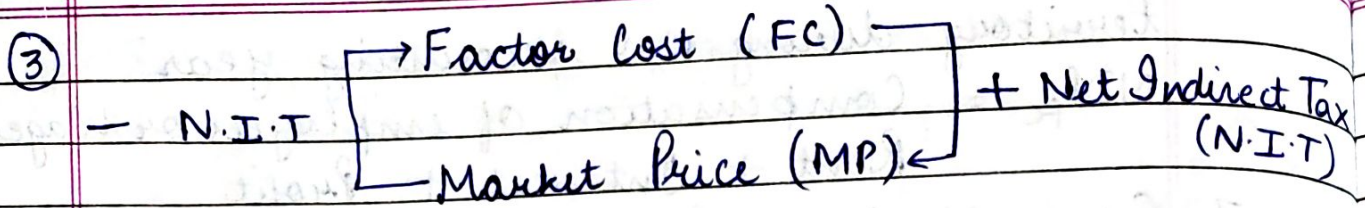


Suppose, we have to find NDP_{MP} & GDP_{MP} is 1000
Depreciation is 40

$$\begin{aligned} NDP_{MP} &= GDP_{MP} - \text{Dep.} \\ &= 1000 - 40 \\ &= 960 \end{aligned}$$

②





→ Net Indirect Tax (NIT)

* Difference between Indirect Taxes and Subsidies

$$N.I.T = \text{Indirect Taxes} - \text{Subsidies}$$

• Indirect Taxes :-

* Taxes imposed by govt. on production and sale of goods and services
e.g. GST, Custom duty, excise duty, stamp duty etc.

* Indirect taxes increase the price of product in market.

• Subsidies

* Financial assistance provided by govt. to producers to fulfil its social welfare objectives.

* Subsidies → 'transfer payment' (one sided payment), as it is a financial help by govt. and govt. doesn't get anything in return.

* Subsidies lower market price of goods.

NOTE :-

* Market Price = Factor cost in 2 sector economy which includes household & producer sector.

* Taxes & subsidies play role when govt. sector is there.

GDP

Nominal GDP

Real GDP

* GDP at current price

* GDP at constant price

* Current price → price prevailing during year of estimation.

* Constant price → base year [year of comparison] price

* $Nominal\ GDP = Q \times P$
 $Q \Rightarrow$ Quantity of final goods and services produced during accounting year
 $P \Rightarrow$ current year price

* $Real\ GDP = Q \times P^*$
 [where $P \rightarrow$ constant]
 [$Q \rightarrow$ same]

* Nominal GDP can ↑ when there is ↑ in either P or Q

* Real GDP ↑ only when there is ↑ in Q

* Not a good measure of welfare of people.

* Good measure of welfare of people

* Higher Real GDP means ↑ availability of goods and services to residents of country.

* $Nominal\ GDP \rightarrow$
 $= Real\ GDP \times \frac{Price\ Index}{100}$

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

* GDP deflator or Price Index = $\frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$

* shows change in GDP due to change in price level

→ GDP and welfare :-

* have +ve relationship

* But there are following limitations where GDP growth fails to reflect ↑ in social welfare.

① Distribution of income :-

* Unequal distribution

* Deep economic divide (gap between rich & poor ↑)

* GDP ↑, but people dying of hunger.

② Composition of GDP :-

* may not be welfare oriented

* E.g. ↑ in production of defence goods does not directly ↑ welfare of people, but indirectly does.

③ Non-monetary exchanges :-

* Barter system still prevails

* Such transactions remain unrecorded due to absence of money.

* Underestimation of GDP, inappropriate index of welfare

④ Externalities :- +ve and -ve impacts of economic activity, without paying price or penalty.

- * GDP does not take these into account.
- * Therefore, inappropriate measure of welfare.