

National Income

- Three aspects of National Income:
 - a) Production aspect
 - b) Income or distribution aspect
 - c) Expenditure aspect

- **Production Aspect:** It points to flow of goods and services in the economy or process of value adding.
- **Income or distribution aspect:** It points out to generation of income in terms of wages, rent, interest and profit.
- **Expenditure aspect:** It indicates disposal of income in terms of consumption expenditure or investment expenditure.

Product method or value-added method

- Product Method or Value-added method is that method which measures national income by estimating the contribution of each producing enterprise to production in the domestic territory of country in an accounting year.
- Value of output = Sales + change in stock (if some output remains unsold at the end of year)
- Change in stock = closing stock - opening stock

Estimating Value Added

Item produced	Value of Output	Inter-mediate goods	Value Added
Wheat	600	200	400
Flour Mill	800	600	200
Baker	1000	800	200
Shop-keeper	1200	1000	200
Total	3600	2600	1000

- Thus, the gross value added by all producing enterprises is Rs (400+ 200+200+200 = 1000)
- Gross value added by all producing enterprises within the domestic territory of a country during the period of one year is called GDP at M.P.
- Thus, Gross Value added by all producing enterprises in (PRIMARY SECTOR + SECONDARY SECTOR + TERTIARY SECTOR)
=GDP at M.P.

Measurement of N.I. (value-added method)

- GDP at M.P. {Gross value added in Primary-sector + secondary sector+ tertiary sector} - Depreciation = N.D.P. at M.P. - Net Indirect Taxes = N.D.P at F.C. + NFYA = NNP at F.C. (National Income)

Precautions regarding Product-method or Value –added method

- Sale and purchase of second-hand goods is not included in value- added. Because, value of second hand goods is already accounted for during the year of production.
- Commission earned on sale and purchase of second hand goods is included.
- Own account production of goods is taken into account. They are simply not sold owing to their need by producers themselves.
- Value of intermediate goods is not included, because value of intermediate goods is already reflected in value of final goods.

- Imputed rent of owner occupied houses is also taken into account, because all houses have rental value.
- Services for self-consumption is not considered, because it is difficult to estimate their market-value
- Value added in Govt. sector is equal to compensation of employees only.

Problem of double-counting

- The problem of double-counting is the problem of estimating the value of goods and services more than once.
- This leads to over-estimation of value of goods and services produced.

How to avoid double-counting?

- 1) Final output method- According to this method, value of intermediate goods is deducted from value of output. In other words, value of final goods and services only is included in National Income.

Value of Final Output= {Value of output-value of intermediate goods} (3600-2600=1000)

- 2) Value-added method- Value-added refers to the difference between value of output and value of intermediate consumption of each producing unit. SUM-TOTAL of value-added by all producing units within the domestic territory of a country is equal to domestic-product. (400+200+200+200)

Income-Method

- Income-method is that method which measures National-Income in terms of payments made in the form of wages, rent, interest and profit.
- What are Factor-Incomes?
- Factor-Incomes are earned-incomes, transfer payments are unearned.
- Factor-incomes are rewards for rendering factor-services. Transfer payments are just one-sided payments. No service is rendered in return for transfer payments.

Classification of Factor-Incomes

COMPENSATION OF EMPLOYEES

It includes:-

- a) wages and salaries in cash
- b) payment in kind
- c) employers' contribution to social-security scheme
- d) pension on retirement

- OPERATING SURPLUS:
- It includes income from property and entrepreneurship. It is earned in both private and Govt. sector. It includes:
 - Rent
 - Interest
 - Profit (Dividend + corporation tax + saving of enterprise or undistributed profits)

- MIXED INCOME:
- Mixed- Income refers to the income of SELF-EMPLOYED persons using their labour, land, capital and entrepreneurship to produce goods and services. These incomes are mixed in terms of wages, rent, interest and profit. That is why, it is called mixed income.
- NDP at F.C. = sum-total of factor-incomes generated within domestic territory of country during an accounting year.

Measurement of National- Income(Income- Method)

- NDP at F.C. {compensation of employees+operating surplus+mixed income}
- +
- NFYA {Net factor income from abroad}
- =
- NNP at F.C. {National Income}

Precautions while estimating Factor-Incomes

- Transfer-earnings like old-age pensions, unemployment allowances, scholarships, pocket expenses etc. should not be included in N.I. Because, corresponding to transfer-payments, there is no value-addition in the economy. However, it should be remembered that retirement pension is included in N.I. as it is a part of compensation of employees.
- Income from illegal activities not to be included.
- Sale proceeds of second-hand goods not to be included.

- Sale-proceeds of shares and bonds are not included in N.I. Because such transactions are not related to flow of goods and services.
- Windfall gains, like lotteries and capital-gains not to be included as there is no value addition corresponding to windfall gains.
- Imputed rent of owner-occupied houses is included in N.I.
- Goods for self-consumption should be included.
- Indirect taxes like sales-tax, excise-duty, tend to increase M.P. of goods and services. These are included in estimation of N.I. at M.P. but are NOT to be included while estimating N.I. at F.C.

- Corporate tax, dividends and undistributed profits are all components of corporate profits. Once profit is included in N.I, any of these components should not be separately added.
- Income-tax is paid out of compensation of employees. It should not be separately added.
- Gift tax, wealth tax, taxes on windfall gains are paid not out of current income but out of past savings of tax-payer. These are not to be included in estimation of N.I

EXPENDITURE METHOD

- Expenditure Method is the method which measures final expenditure on GDP at M.P. during an accounting year. FINAL EXPENDITURE is equal to GDP at MP. This is also called Income-Disposal method.

What is Final-Expenditure?

- It refers to expenditure on final goods and services in an year.
- If an enterprise uses goods purchased from other enterprises for re-sale or as raw-material, the expenditure on such goods will be inter-mediate expenditure.
- On the other-hand, if goods and services are produced for final consumption, the expenditure on them is final expenditure.

Classification of Final - expenditure

1) PRIVATE FINAL CONSUMPTION EXPENDITURE:

- It refers to expenditure on final goods and services by individuals, households and non-profit organizations.

2) GOVT. FINAL CONSUMPTION EXPENDITURE:

- It refers to expenditure on final goods and services by Govt.

- 3) **INVESTMENT EXPENDITURE:** It refers to expenditure on purchase of final goods by producers. These goods are to be further used in process of production. Investment expenditure is classified as:
- A) Fixed Investment (by business, household, Govt.)
 - B) Inventory Investment: It refers to change in stock (closing stock-opening stock)

4) NET EXPORTS (X-M)

It refers to difference between exports and imports during an year.

Measurement of N.I(expenditure method)

- 1) Final consumption expenditure
{Private+Government} +
- 2) Gross Domestic Capital Formation {Gross domestic fixed capital formation(business/govt/household) + Change in stock (closing stock-opening stock)}
+
- 3) Net Exports (Exports-Imports) =
- 4) GDP at M.P. – depreciation = NDP at M.P.- Net Indirect Taxes = NDP at F.C + NFYA = NNP at F.C.

From the following data, calculate Net National Income

	Particulars	(In crores)
1	Current transfers frm ROW	100
2	Govt. final consumption exp	1000
3	Wages and salaries	3800
4	Dividend	500
5	Rent	200
6	Interest	150
7	Net Domestic Capital Formation	500

8	Profits	800 Crores
9	Employers' contribution to S.S.	200
10	Net exports	-50
11	NFYA	-30
12	Consumption of fixed-capital	40
13	Pvt. Final consumption exp	4000
14	Net Indirect tax	300

Income-Method

- $NDP \text{ at F.C.} = COE + OS + MI$
 $= (\text{wages \& salaries} + \text{employers' contribution}) +$
 $(\text{rent} + \text{interest} + \text{profit}) + 0$
 $= (3800 + 200) + (200 + 150 + 800) +$
 $0 = 5150 \text{ crores}$

$$NNP \text{ at F.C.} = NDP \text{ at F.C.} + NFYA$$
$$= 5150 + (-30) = 5120 \text{ crores}$$

Expenditure Method

- $\text{GDP at M.P.} = \text{PFCE} + \text{GFCE} + \text{GDCF} + \text{Net Exports}$
 $= 4000 + 1000 + (500+40) + (-50)$
 $= 5490 \text{ crores}$

$$\begin{aligned} \text{NNP at F.C.} &= \text{GDP at M.P} - \text{Dep} + \text{NFYA} - \text{NIT} \\ &= 5490 - 40 + (-30) - 300 \\ &= 5120 \text{ crores} \end{aligned}$$

	Items	In crores
1	Current Transfers frm Govt.	25
2	Govt. Final consumption exp	200
3	NDP at FC acc to Govt. sector	90
4	Compensation to Govt. employees	80
5	Net Exports	-50
6	Interest on National Debt	60

7	Depriciation	30 crores
8	Net Domestic Capital Formation	100
9	Net factor income paid abroad	20
10	Pvt. Final consumption exp	600
11	Net Indirect Tax	40
12	Net Current Transfers frm abroad	-10
13	Corporation Tax	30
14	Subsidies	10
15	Savings of Pvt. sector	50

Calculation of NI (exp method)

- GDP at M.P = PFCE + GFCE + (NDCF + Dep) + Net Exports
= 600 + 200 + (100+30) + (-50)
= 880 crores

$$\begin{aligned} \text{NNP at F.C.} &= \text{GDP at M.P} - \text{Dep} + \text{NFYA} \\ &\quad - \text{NIT} \\ &= 880 - 30 + (-20) - 40 \\ &= 790 \text{ crores} \end{aligned}$$

To calculate Personal Income

- $$\begin{aligned} \text{NDP at F.C.} &= \text{NNP at F.C.} - \text{NFYA} \\ &= 790 - (-20) \\ &= 810 \text{ crores} \end{aligned}$$

Income from Domestic Product acc to
Pvt. Sector = NDP at F.C – NDP at F.C
acc to

$$\begin{aligned} &\text{Govt. sector} \\ &= 810 - 90 \\ &= 720 \text{ crores} \end{aligned}$$

- Private Income = IDPAPS + NFYA + Current Transfers from Govt + Current Transfers from ROW + Interest on National Debt.
= 720 + (-20) + 25 + (-10) + 60
= 775 crores

Personal Income : Private Income – corporate tax – corporate savings
= 775 – 30 – 50
= 695 crores