

## NATIONAL INCOME AND RELATED AGGREGATES

### KEY POINTS:

- ❖ For any income /expenditure /good or service to be included in GDP (Domestic factor income), it should
  - i) be an economic activity.
  - ii) accrue within domestic territory.
- ❖ For any item to be included in National Income (NNP<sub>FC</sub>), it should
  - i) be an economic activity.
  - ii) be earned or accrue to the normal resident of the country.
- ❖ Any good can be an intermediate good or a final good depending upon its usage. If it is to be used by final consumer or is used as fixed asset, then it is a final good. If the good/service is still inside the production boundary i.e still inside the production boundary i.e it is either processed further or is brought for resale, then it is an intermediate product.
- ❖ Following items will not be included in the estimation of GDP or National Income
  - a) Illegal income s
  - b) Transfer incomes/ Transfer payments
  - c) Sale / Purchase of second hand goods.
  - d) Value of intermediate goods.
  - e) Windfall gains & capital gains.
  - f) Financial transactions like sale and purchase of shares etc.

## IMPORTANT FORMULAE

### Estimation of National Income

- 1) Estimation of GDP<sub>MP</sub> (Income method/ Expenditure method/Value added method)
- 2)  $GNP_{MP} = GDP_{MP} + NFIA$
- 3)  $NNP_{MP} = GNP_{MP} - \text{Depreciation}$
- 4)  $NNP_{FC} = NNP_{MP} - \text{Net indirect taxes}$
- 5)  $NFIA = \text{Factor income from abroad} - \text{Factor income to abroad}$
- 6)  $\text{Net Indirect Taxes} = \text{Indirect taxes} - \text{Subsidies}$

### Estimation of GDP<sub>MP</sub>

#### 1. Income Method

$NDP_{FC} = \text{Compensation of employees} + \text{Operating surplus} + \text{Mixed income of self employed}$

#### 2. Expenditure Method

$GDP_{MP} = \text{Private final consumption expenditure} + \text{Government final consumption expenditure} + \text{Gross domestic capital formation} + \text{Net exports.}$

#### 3. Value Added Method

- i) Value of output = Sales + Change in stock.
- ii)  $GVA_{MP} \text{ of } GDP_{MP} = \text{Value of output} - \text{Intermediate consumption.}$

### Estimation of Private Income, Personal Income & Personal Disposable Income.

#### PRIVATE INCOME

- i) Income from domestic product accruing to private sector=  $NDP_{FC} - \text{Income from property and entrepreneurship accruing to government administrative departments- savings of non departmental enterprises}$

ii) Private Income = Income from domestic product accruing to private sector + NFIA + All current transfers (Interest from national debt, Transfer payment from abroad, Transfer payment from Rest of the world)

### PERSONAL INCOME

Personal Income = Private Income - retained earnings - Corporate tax

### PERSONAL DISPOSABLE INCOME

Personal Disposable Income = Personal Income - Personal taxes - Miscellaneous receipts of government

### Estimation of National Disposable Income

Net National Disposable Income = National Income + NIT + Net current transfers from ROW

Gross National Disposable Income = NNDI + Depreciation (Current replacement cost)

### 1 Mark Question

1. Give an example each of stock and flow.
2. Butter is always a final product. Comment.
3. Capital formation is a flow. Justify.
4. National Income includes only final goods. Why?
5. Identify the basis of distinction between intermediate goods and final goods.
6. Name the two sectors in which real flow takes place in a simple economy.
7. In National Income a stock concept or flow concept? Why?
8. When will GDP of an economy be equal to GNP?
9. Identify one way in which the problem of double counting may be avoided.
10. How is National Income at current price different from National Income at constant prices.

### **3-4 MARK QUESTIONS**

1. Distinguish between consumer goods and capital goods. Which of these are final goods?
2. "Machine purchased is always a final good". Do you agree? Give reasons for your answer.
3. Distinguish between domestic product and national product. When can domestic product be more than national product?
4. Give the meaning of Nominal GDP and Real GDP. Which of these is the indicator of economic welfare?
5. Explain how 'Non monetary exchanges are a limitation in taking GDP as index of welfare.
6. Explain how distribution of GDP is its limitations in taking as a measure of economic welfare?
7. Explain the problem of Double counting in the estimation of National income by Value added method.

8. How can the problem of Double counting be avoided?
9. Discuss any two precautions required while estimating National Income.
10. State whether the following is a Stock or Flow:
  - i) Wealth
  - ii) Cement Production
  - iii) Money supply
  - iv) Change in nation's money supply.

### **NUMERICAL PROBLEMS (3 Marks)**

1. From the following data, Calculate net value added at factor cost by a firm.

Particulars	Rs in lakhs
Subsidy	40
Sales	800
Depreciation	30
Exports	100
Closing stock	20
Opening Stock	50
Intermediate purchases	500
Purchase of machinery for own use	200
Import of raw material	60

2. Calculate 'Value of Output' from the following data.

Particulars	Rs in lakhs
NVA <sub>FC</sub>	100
Intermediate consumption	75
Excise duty	20
Subsidy	5
Depreciation	10

3. Calculate 'Intermediate consumption' from the following data.

Particulars	Rs. in Lacs
Value of output	200
Net value added at fc	80
Sales Tax	15
Subsidy	5

Depreciation	20
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4. Calculate 'Sales' from the following data.

Particulars	Rs. in Lacs
NVA <sub>FC</sub>	300
Intermediate consumption	200
Indirect taxes	20
Depreciation	30
Change in stocks	-50

5. Calculate gross value added at factor cost.

Particulars	Rs. in Lacs
Units of output sold	1000
Price per unit of output	30
Depreciation	1000
Intermediate Cost	12000
Closing stock	3000
Opening Stock	2000
Excise duty	2500
Sales tax	3500