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(Affiliated to CBSE up to +2 Level)

Class: 12th

Subject: Economics

Date -11.01.2022

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National Income and Related Aggregates.

Introduction:

This is a numerical based chapter to calculate national income by different methods (Income, expenditure and value added method, their steps and precautions). Numerically to determine private income, personal income, personal disposable income, National disposable income (net and gross) and their differences.

Gross and Net:

1. Gross means the value of product including depreciation. Net means the value of product excluding depreciation.
2. The difference between these two terms is depreciation.
3. Where depreciation is the expected decrease in the value of fixed capital assets due to its general use.
4. It is the result of production process.

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

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

Note: Other names of depreciation are:

- (a) Consumption of fixed capital (b) Capital consumption allowance (c) Current replacement cost.

National Income And Domestic Income:

1. National Income refers to net money value of all the final goods and services produced by the normal residents of a country during an accounting year.
2. Domestic Income refers to a total factor incomes earned by the factor of production within the domestic territory of a country during an accounting year.
3. The difference between these two incomes is Net Factor Income from abroad (NFIA), which is included in National Income (NY) and excluded from Domestic Income (DY).
4. Where NFIA is the difference between income earned by normal residents from rest of the world and similar payments made to Non residents within the domestic territory. $\text{NFIA} = \text{Income earned by Residents from rest of the world (ROW)} - \text{Payments to Non-Residents within Domestic territory}$. $\text{NY} = \text{DY} + \text{NFIA}$ $\text{DY} = \text{NY} - \text{NFIA}$

Note:

Case I: Income paid to abroad is given, then to make NFIA inverse the sign. For this put income from abroad 0.

Example, Income paid to abroad = 100

$\text{NFIA} = \text{Income from Abroad} - \text{Income paid to abroad} = 0 - 100 = -100$ and vice versa.

Case II: Income from abroad is given, then NFIA = Income from abroad. For this put income paid to abroad 0.

Example, Income from abroad = 100

$\text{NFIA} = \text{Income from Abroad} - \text{Income paid to abroad} = 100 - 0 = 100$ and vice versa Case III: If income from abroad and income paid to abroad both are given, then NFIA is the difference between them,

Example, Income from abroad = 100 Income paid to abroad = 120

$\text{NFIA} = \text{Income from Abroad} - \text{Income paid to abroad} = 100 - 120 = (-) 20$ and vice versa Case IV: Net factor income to abroad be given, then to make NFIA inverse the sign.

Net factor income paid to abroad (NFPA) = income to abroad – income from abroad.

Example,

(i) Net Factor Income to abroad (NFPA = 100). In this NFPA is positive, which means that income to abroad is greater than income from abroad, which makes,

$\text{NFIA} = (-)100$

(ii) Net Factor Income to abroad [NFPA = (-)100]. In this NFPA is negative, which

means that income to abroad is less than income from abroad, which makes, $\text{NFIA} = (+) 100$

Factor Cost And Market Price:

1. Factor Cost (FC): It refers to amount paid to factors of production for their contribution in the production process.

2. Market Price (MP): It refers to the price at which product is actually sold in the market. The difference between these two is Net Indirect Taxes (NIT) which is included in MP and excluded from FC. Where NIT is the difference between indirect taxes and subsidies.

$$\text{NIT} = \text{IT} - \text{Subsidies}$$

Where, Indirect Taxes are the taxes which are levied by the government on production and sale of commodity. Sales tax, excise duty, custom duty, etc. are some of the indirect taxes, and subsidies are the cash grants given by the government to the enterprises to encourage production of certain commodities, to promote exports or to sell goods at prices lower than the free market Price. In India, LPG cylinder is sold at subsidized rates.

$$\text{MP} = \text{FC} + \text{NIT (Indirect Taxes - Subsidies)}$$

$$\text{FC} = \text{MP} - \text{NIT (Indirect Taxes - Subsidies)}$$

Note:

Case I: Subsidy is given, then to make NIT inverse the sign. For this put Indirect tax = 0.

Example, Subsidy = 100

$\text{NIT} = \text{Indirect Tax} - \text{subsidies} = 0 - 100 = (-) 100$ and vice versa

Case II: IT is given, then $\text{NIT} = \text{IT}$ (For this put subsidy 0)

Example, IT = 100

$\text{NIT} = \text{Indirect Tax} - \text{subsidies} = 100 - 0 = 100$ and vice versa

Case III: If IT and subsidy both are given, then NIT is the difference.

Example, IT = 100

Subsidy = 80

$\text{NIT} = \text{Indirect Tax} - \text{subsidies} = 100 - 80 = 20$

Case IV: If sales tax and excise duty are given, then by adding both, we get indirect taxes.

Example, Sales tax = Rs. 1000

Excise duty = Rs.1000 Subsidy = Rs.500

$\text{NIT} = \text{Indirect Tax}(\text{sales tax} + \text{excise duty}) - \text{subsidies} = (1000 + 1000) - 500 = 1500$

Case V: If Net subsidy is given, then to convert it into Net Indirect tax, we have to inverse the sign,

$\text{Net Subsidy} = \text{Subsidy} - \text{Indirect Tax}$

Example,

(a) Net Subsidy = 100. In this, Net subsidy is positive, which means that indirect tax is less than subsidy which makes,

$\text{NIT} = (-) 100$

(b) Net Subsidy = (-) 100. In this Net subsidy is negative which means that Indirect tax is greater than subsidy which makes,

$\text{NIT} = 100$

Case VI: If Net subsidy and Indirect tax both are given, then we have to ignore Indirect Tax and inverse the sign of Net subsidy.

Example, Net Subsidy = 100

Indirect Tax = 20 Net Indirect Tax = (-) 100

Aggregate Of National Income

1. Gross Domestic Product at Market Price (GDP_{MP}): GDP_{MP} is defined as the gross market value of the final goods and services produced within the domestic territory of a country during an accounting year by all production units.

(a) 'Gross' in GDP_{MP} signifies that depreciation is included, i.e., no provision has been made for depreciation.

(b) 'Domestic' in GDP_{MP} signifies that it includes all the final goods and services produced by all the production units located within the economic territory (irrespective of the fact whether produced by residents or non-residents).

(c) 'Market Price' in GDP_{MP} signifies that indirect taxes are included and subsidies are excluded, i.e., it shows

that Net Indirect Taxes (NIT) have been included.

(d) 'Product' in GDP_{MP} signifies that only final goods and services have to be included and intermediate goods should not be included to avoid the double counting.

2. Gross Domestic Product at Factor Cost (GDP_{FC}): GDP_{FC} is defined as the gross factor value of the final goods and services produced within the domestic territory of a country during an accounting year by all production units excluding Net Indirect Tax.

$$GDP_{FC} = GDP_{MP} - \text{Net Indirect Taxes}$$

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

NDP_{MP} is defined as the net market value of all the final goods and services produced within the domestic territory of a country by its normal residents and non-residents during an accounting year.

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

4. Net Domestic Product at Factor Cost (NDP_{FC}).

NDP_{FC} refers to a total factor income earned by the factor of production within the domestic territory of a country during an accounting year.

$NDP_{FC} = GDP_{MP} - \text{Depreciation} - \text{Net Indirect Taxes}$ NDP_{FC} is also known as Domestic Income or Domestic factor income.

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

GNP_{MP} refers to market value of all the final goods and services produced by the normal residents of a country during an accounting year.

$GNP_{MP} = GDP_{MP} + \text{Net factor income from abroad}$ It must be noted that GNP_{MP} can be less than GDP_{MP} when NFIA is negative. However, GNP_{MP} will be more than GDP_{MP} when NFIA is positive.

6. Gross National Product at Factor Cost (GDP_{FC}) or Gross National Income GNP_{FC} refers to gross factor value of all the final goods and services produced by the normal residents of a country during an accounting year.

$$GDP_{FC} = GNP_{MP} - \text{Net Indirect Taxes}$$

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

NNP_{MP} refers to net market value of all the final goods and services produced by the normal residents of a country during an accounting year.

$$NNP_{MP} = GNP_{MP} - \text{Depreciation}$$

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

NNP_{FC} refers to net money value of all the final goods and services produced by the normal residents of a country during an accounting year.

$NNP_{FC} = GNP_{MP} - \text{Depreciation} - \text{Net Indirect Taxes}$ It must be noted that NNP_{FC} is also known as National Income.