UNITE SEVEN

NATURE AND MEANING OF NATIONAL INCOME ACCOUNT

Unit Objectives After completing this unit, you will be able to:

- appreciate national income account and its importance;
- understand and compute the different approaches used to measure GDP; and
- Analyze the difference between nominal and real GDP.

National income account

- Is defined as the aggregate monetary value of all the final goods and services produced in a country during a year.
- Domestic product is defined as the value of all final goods and services produced by all the enterprises located within the territory of a country.
- National product refers to the amount of final goods and services produced by normal residents of a country.

The following are main features of national income:

- ✓ National income is counted for a period of one accounting year,
- ✓ National income is a flow concept. National income is a measure of the flow of goods and services during a year,
- ✓ We include only final goods and services in the calculation of national income. Intermediate goods are not included in the calculation of national income,
- ✓ National income is expressed in terms of monetary value of goods and services.

Importance of National Income Accounting

- National income accounting is a method of preparing and presenting national income accounts based on the principle of double entry system of business accounting.
    - **Indicator of Economic Progress**: Particularly in underdeveloped economies, the State has to actively participate in various programs of development, and for that it has to formulate economic policies.
        - For the formulation of plans and determination of priorities, it has to estimate national income data.
    - **Investment, consumption, employment, etc**.: All these estimates require data relating to national income. National accounts are also helpful in the assessment of various programs of development.
    - **Significance in Business Policy Making**: National income data are also needed for formulation of policies in different businesses. Individual firms are always interested to know the contribution to national income by the particular industry to which they belong.
    - **Significance for Trade Unions**: National income accounts are of great use to trade unions and labor

organizations.

- **Measure of Economic Growth**: National income accounts are used to measure the rate of economic growth.
- **Comparison with other Countries**: National income accounts help in international comparisons.
- **Knowledge of Structural Changes**: National income accounts reveal the structural changes taking place in an economy.
- **Significance for Economic Analysis**: National income is an important concept of economic theory. Study of national income accounts is essential to identifying interrelationships between different sectors of an economy.

GDP GROSS DOMESTIC PRODUCT AND GNP GROSS NATIONAL PRODUCT DEFINITION AND MEASUREMENT

Gross Domestic Product

- Gross Domestic Product (GDP) is the market value of all the final goods and services produced within the domestic territory of a country during a year.

In order to understand the meaning of GDP, note the following points:

- Gross Measure: It is an aggregate measure. It measures gross value of the products.
- Market value: GDP measures the value of goods and services at their Market Price. Hence it is also termed as Gross Domestic Product at market prices (GDP MP).
- New Production: GDP includes the value of output produced in the "new" current accounting year only. It does not account for the value of existing or old goods.
- GDP includes only the value of final goods and services, i.e., finished products only: It does not take into account the value of intermediate goods, such as raw materials, power, fuel, etc. We differentiate between intermediate and final goods as follows:

^ **Intermediate goods** – Goods that are used for further production by passing through some production process as secondary inputs are called intermediate goods.

^ **Final goods** – Goods that are used either for final consumption by the consumers or for investment by the producers are called final goods.

Gross National Product

- Gross National Product (GNP) is the money value of all final goods and services produced in the domestic territory of a country during a year plus net-factor income from abroad minus factor income of non-residents in domestic territories.

$$GNP\ MP = GDP\ MP + NFI$$

Where, GNP MP = Gross National Product at market prices

GDP MP = Gross Domestic Product at market prices NFI = Net Factor Income

NFI is the difference between factor income flowing out of the country and flowing into the country.

NFI = Factor income earned from abroad by residents – factor income of non-residents in domestic

Approaches to Measuring GDP

There are three different phases in circular flow of national income: **production, income and expenditure**.

- Production of goods and services is the result of combined efforts of factors of production (land, labor, capital and entrepreneurs).

The net output emerging from the production process gets distributed in the form of money income (rent, wages, interest and profit) among factors of production. With this income factor of production, we purchase goods and services for final consumption and investment.

Expenditure in turn gives rise to further production.

I ***Production Method (Value Added Method)***

In this method, two approaches – 'Final Product Approach' and 'Value Added Approach' – are adopted.

i ***Final Product Approach***. According to this approach, in the estimation of

GDP, we include the market value of all final goods and services produced in a country. For example, if we manufacture thread from cotton, cloth from thread and shirts from cloth, here shirts are the final good. Hence, we should include the value of shirts only in the calculation of national income.

GDPMP = P (Q) + P (S) (7.3)

Where, P = Market price

Q = Quantity of goods

S = Quantity of services

- ✓ **Problem of Double Counting in the Final Product Approach**:
  - The final product approach cannot be used in actual practice because production is a continuous process and in this process it is difficult to know the final product. It gives rise to the problem of double counting.
- Counting the value of a commodity more than once in the measurement of national income is called double counting.

To overcome the difficulty of double counting, the value added approach is used.

ii. ***Value Added Approach***.

- The value added approach measures the value added (contribution) by each producing enterprise in the production process in the domestic territory of a country in an accounting year.
- Value added is defined as the difference between total value of the output of a firm and the value of inputs bought from other firms.

The following steps are involved in estimating national income by the value added approach:

- ✓ Identifying all the producing units in the domestic economy and classifying them into three economic sectors: primary, secondary and territory sectors.
    - (The primary sector exploits natural resources, the secondary sector transforms one type of commodity into another, and the tertiary sector renders services.),
- ✓ Estimating the value added by each producing unit. (By deducting intermediate consumption, from value of output, we get the value added.),
- ✓ Estimating the value added of each economic sector by summing up the value added of all producing units falling in each industrial sector,
- ✓ Computing GDP MP by adding up the value added of all economic sectors.
- ✓ Estimating net factor income from abroad, which is added to GDP MP to obtain GNP MP

II Income Method

- ➢ The income method measures national income from the side of payments made to the primary factors of production in the form of rent, wages, interest, and profit for their productive services in an accounting year.
- ➢ Since the income of factors of production is cost to their employers, so factor income and factor cost are the same.
- ➢ Thus if the factor incomes of all the producing units generated within the domestic economy are added up, the resulting total will be the domestic income at factor cost.

Remarks:

1. **Depreciation** means loss of the value of fixed capital assets during production. In other words, depreciation is the value of existing capital stock that has been consumed (used up) in the process of producing output.
    - ➢ Fall in the value of fixed assets due to normal wear and tear and to expected obsolescence is called consumption of fixed capital or depreciation.
2. Taxes which are levied by the government on production and sale of commodities are called indirect taxes — for example, excise duty, sales tax, custom duty, etc.
    - ➢ The buyer of a taxed commodity pays the tax indirectly because the tax is included in the price, which the buyer pays. The effect of indirect tax is that it increases the price of a commodity.

The following steps are involved in estimating national income by the income method.

- Identifying enterprises which employ factors of production (land, labor, capital and entrepreneurship),
- Classifying various types of factor payments like rent, wages, interest and profit,
- Estimating the amount of factor payments made by each enterprise,
- Summing up of all factor payments made within the domestic territory to get the domestic income at factor cost,

- Adding the value of depreciation and indirect taxes to domestic income at factor cost to get GDP MP ,
- Estimating net factor income from abroad, which is added to GDP MP to obtain GNP MP . To correctly compute national income by the income method, the following precautions need to be taken.
- Only factor incomes which are earned by rendering productive services are included. All types of transfer income are not included.
- Imputed rent of owner-occupied dwellings and the value of production for self-consumption are included, but the value of self-consumed services is not included.
- Income from illegal activities like smuggling, black marketing, etc., as well as windfall gains from lotteries, etc., are not included.

III Expenditure Method

- The expenditure method gives us the value of GDP at MP when measured at the point of expenditure. From the expenditure point of view, GDP is gross expenditure on the final use of domestically produced goods and services during a period of account.

Basically the final use of goods and services is for two purposes:

- consumption purposes for direct satisfaction of wants,
- investment purposes, for expanding productive capacity.

GDPMP = Private final consumption expenditure + government final consumption expenditure + gross fixed capital formation + change in stocks + net exports

- **Private final consumption expenditure**: It measures the money value of goods and services purchased by households for current use during a time.
- **Government final consumption expenditure**: It is defined as "Current expenditure on goods and services incurred in providing services of government administrative departments less sales.
- **Gross fixed capital formation**: Expenditure on it consists of mainly two items

  ^ Construction, and

  ^ Machinery and equipment.
- **Change in stocks**: This refers to the physical change in stocks of inventories like raw material, semi-finished goods and finished goods lying with the producers for smooth working of production processes.
  - It is the difference between the stocks in the beginning of and at the end of the accounting year. (inventories or unsold outputs).
- **Net exports (exports less imports):** This refers to the difference between the value of exports and value of imports.

Note that exports and imports include both material goods as well as services.

GDPMP= C + Ig + G + (X – M) (7.6)

Where, C = Consumption expenditure by households

Ig = Gross Investment expenditure by firms

G = Government expenditure on goods and services

X – M = Net exports

Also, GNP MP = GDP MP + NFI

The following precautions need to be taken to correctly estimate national income by the expenditure method:

- To avoid double counting, expenditure on all intermediate goods and services is excluded.
- Government expenditure on all transfer payments, such as scholarships, unemployment allowances, old age pensions, etc., is excluded because non-productive services are rendered by the recipients in exchange.
- Expenditure on purchase of second-hand goods is excluded from national income because this type of expenditure is not on currently produced goods.
- Expenditure on purchase of old shares/bonds or new shares/bonds etc. is excluded because it is not payment for goods or services currently produced. It shows mere transfer of property from one person to another.

Problems in Measuring GDP

Conceptual Problems