

14.MACRO ECONOMICS – CONCEPTS OF - GROSS NATIONAL PRODUCT (GNP) - GROSS DOMESTIC PRODUCT (GDP) - NET NATIONAL PRODUCT (NNP) - PERCAPITA INCOME.

In the first chapter, we have learnt that the subject matter of economics can be broadly categorised into microeconomics and macroeconomics. In the last six chapters, we have discussed about the microeconomics. In this chapter, we shall discuss some important topics of macroeconomics.

A. NATIONAL INCOME

Macroeconomics approaches the economic problems in terms of aggregates like national income, general employment level, aggregate demand, aggregate production and so on. The important among the above is national income. The one common thing to all products is value. Therefore, measurement of national income must be in money terms.

i) Measurement of National Income

National Income (NI) is the total money value of incomes received by persons and enterprises in the country during the year. It is the sum of all incomes derived from providing the factors of production, i.e., the return to all factors of production owned by the residents of a nation. It included wages and salaries, rents, interests and profits. National Product or the National Income is, thus, the aggregate money value of all-final goods and services produced in a country during a year. The national income can be measured in three ways. They are:

a) Income method: Sum of all incomes, in cash and kind, derived from providing all factors of production in a given time period.

b) Production method: Sum of value of all the outputs (goods and services) arising in several sectors of the nation's production during a given year.

c) Expenditure method: Sum of consumers' expenditure, government expenditure of goods and services and net expenditure on capital goods. If properly calculated, all these three measures of national income would give the same result.

ii) Concepts of National Income: A clear understanding of the concept of national income would give us an idea about the various components of national income.

a) Gross Domestic Product (GDP): It is the money value of the final products of all resources located within the country irrespective of whether the owners of various resources live there or abroad.

b) Gross National Product (GNP): it refers to the aggregate money value of all final goods and services produced in a year (in a country). GNP is the personal consumption expenditures (C) plus Government purchases of goods and services (G) plus gross private domestic investment (I_g) plus exports of goods and services (X) less imports of goods and services. In symbols, it is written as:

$$\text{GNP} = C + I_g + G + (X - M)$$

c) Net National Product (NNP): As production is carried on over time, a certain amount of fixed capital is used up. Part of it may be worn out or some may become obsolete and some may be destroyed by accident. Businessmen consider this used up capital as the cost of production and call this depreciation or capital consumption. The Net National product is given by $\text{NNP} = C + I_n + G + (X - M)$. It follows that $\text{NNP} = \text{GNP} - \text{Depreciation}$. Thus, NNP takes into account the wear and tear of machinery or asset during the year.

d) Gross private domestic investment (I_g): It is equal to the expenditure for new plant and equipment plus the change in inventories. Inventories include stocks of raw materials, intermediate products, and finished goods held by producers or marketing institutions.

e) Net private domestic investment (I_n): It is equal to gross private domestic investment less depreciation. That is $I_n = I_g - \text{Depreciation}$. Depreciation is the loss in the value of physical capital due to wear and tear and obsolescence.

f) Personal Income (PI): It is the total amount of money income actually received by individuals from all resources during a particular year. It excludes undistributed profits of business concerns, income tax paid at source, contributions to social insurance and provident fund. On the other hand, it includes other items of income received by individuals, which are not currently earned like old age pension, unemployment dole, etc. These are called transfer payments.

$\text{Personal Income} = \text{National Income} - \text{Corporate Income Taxes} - \text{Undistributed Corporate Profits} - \text{Social Security Contributions} + \text{Transfer Payments}$.

g) Disposable Income: Disposable income is the personal income minus income tax. The major portion of the disposable income is spent by individual on consumption and the rest is saved.

h) Per Capita Income: The national income divided by population of the country is called the per capita income or the average income per head. The per capita income is a rough index of the standard of living of the people in a country. GNP is one of the most frequently used measures of economic performance in the country. Any major changes in GNP would reflect the severe problems and impressive gains in the economy.

i) Aggregate Demand: It is the total expenditure on consumer goods and services, Government goods and services, (desired) investment, and net exports (that is, exports minus imports). Aggregate Demand (AD) = Consumption Expenditure (c) + investment demand (I) + Government purchases of goods and services (G) + net exports (X-M). Symbolically, $AD = C + I + G + (X-M)$.

j) Aggregate Supply: Aggregate supply refers to aggregate output or real national product produced in a country. Aggregate supply function shows the different possible aggregate outputs supplied at different price levels.

iii) Components of National Income

The national income includes all those different sources of income to the people of a country. These sources can be broadly categorized into agriculture, industry and services.

Table 7.1 National Income of India During 1994-95

Particulars	At 1994-95 Prices	At constant price of 1980-81 (Rupees in Crores)
1.GNP	883,294	249,903
2.NNP	742,632	221,405
3.GDP	864,169	256,095
4.Per capita Income (Rs)	8,282	2,449

iv) Sectors of Economy

a) Agriculture and Allied Activities: This includes farming, animal husbandry, forestry and fisheries.

b) Industry: This includes mining, quarrying, construction, electricity, natural gas, heavy and small-scale industries.

c) Services: Transport and communication, commerce, banking, insurance, profession and government services are included in it.

The contribution of the above three sectors of the economy to national income of India for the year 1994-95 is given in the Table 7.2.

Table 7.2 Contributions of Different Sectors to National Income
(Rupees in Crores)

Sectors	At 1994-95 Prices	At 1980-81 Prices	Percentages
1. Agriculture and Allied Activities	265,201	78,590	30.69
2. Industry	241,839	71,667	27.98
3. Services	357,149	105,838	41.33
4. Gross Domestic Product	864,189	256,095	100.00

v) Difficulties in the Measurement of National Income: There are certain practical difficulties in the calculation of national income. They are:

- a) There are many goods and services, which do not have accurate market prices.
- b) Inadequate information about production, price, etc.
- c) The degree of double counting like stock value appreciation due to inflation.

vi) Uses of National Income

- a) National income shows how the income is earned and spent. It shows the distribution of income among rent, wage, interest and profit.
- b) Per capita income would indicate whether the country is making any economic progress or not.
- c) It is an important instrument of economic planning.
- d) It is also important in assessing the taxable capacity of the people
- e) It is useful to compare the material standards of living of the people in two countries by comparing their national incomes.