UNIT I

NATIONAL INCOME AND MACROECONOMICS
National Income is defined as the sum total of all the goods and services produced in a country, in a particular period of time. Normally this period consists of one year duration, as a year is neither too short nor long a period. National product is usually used synonymous with National income.

Alfred Marshall in his ‘Principle of Economics’ (1949) defines National income as

“The labour and capital of a country, acting on its natural resources, produce annually a certain net aggregate of commodities, material and immaterial, including services of all kinds.....and net income due on account of foreign investments must be added in. This is the true net National income or Revenue of the country or the national dividend.”

Irving Fisher defined national income as

“The national dividend or income consists solely of services as received by the ultimate consumers, whether from their material or from human environments. Thus, a piano or an overcoat made for me this year is not a part of this year’s income, but an addition to capital. Only the services rendered to me during this year by these things are income.”

Central Statistical Organization defines National income as

“National Income is the sum of factor income earned by the normal residents of a country in the form of wages, rent, interest and profit in an accounting year.”

Concepts of National Income
There are different concepts of National Income, namely; GNP, GDP, NNP, Personal Income and Disposable Income.

Gross National Product (GNP)
GNP at market price is sum total of all the goods and services produced in a country during a year and net income from abroad. GNP is the sum of Gross Domestic Product at Market Price and Net Factor Income from abroad.
While calculating GNP, the final goods and services of the following are considered:

(a) Consumer goods and services.
(b) Gross private domestic income.
(c) Goods and services produced by Government.
(d) Net income from abroad.

Keynes had suggested three approaches to National Income in his famous book titled ‘The General Theory’ (1937) namely;

1. Aggregate expenditure (on consumption and investment goods) approach.
2. Factor income approach.

**Approaches to GNP**

There are three different approaches to GNP, namely income approach, expenditure approach and product approach.

1. **Income approach**

   In income approach, we find the different categories of Income namely; (1) Wages and salaries (2) Rents (3) Interest (4) Dividends (5) Undistributed corporate profits (6) Mixed incomes (7) Direct taxes (8) Indirect taxes (9) Depreciation (10) Net income from abroad.

2. **Expenditure approach**

   In expenditure approach, we find the different categories of expenditure namely, (1) Private consumption expenditure (2) Gross domestic private income (3) Net foreign income (4) Government expenditure on goods and services.

3. **Product approach**

   In product approach, we find the following categories of output. (1) Final market value of goods and services (2) Less cost of intermediate goods.

   The following factors are to be considered while calculating the GNP:
   
   1. Only those goods and services which can be measured by Money.
   2. Market price of final goods and services alone will be considered.
   3. Services which are done free of cost are not considered.
   4. Productions done in current year alone are considered.
   5. Illegal activities are not included.

**GNP at Market Price**

If we multiply the total output produced in one year by their ‘Market Prices’, we get GNP at market price.

**Gross National Product at Factor Cost or Gross National Income**

The gross national product at factor cost is the difference between gross national product and net indirect taxes. It is also called gross national income. Gross national income is the sum total of compensation of employees, operating surplus, mixed income, depreciation and net factor income from abroad.
GNP at factor cost refers to income which the factors of production receive in return for their service alone.

\[
\text{GNP at FC} = \text{GNP at Market Price} - \text{Net Indirect Taxes} + \text{Subsidies}
\]

**Subsidies**

Subsidies refer to difference between the Market Price and Cost of Production.

**Gross Domestic Product (GDP)**

Gross Domestic Product is the market value of the final goods and services produced within the domestic territory of a country during one year inclusive of depreciation.

**Components of GDP**

In GDP we find different components of income namely (1) Wages and salaries (2) Rent (3) Interest (4) Dividends (5) Undistributed Profits (6) Mixed income (7) Direct taxes.

**GDP at market price**

GDP at Market Price is estimated by deducting the value of intermediate consumption from the value of output produced by all the producers within the domestic territory of a country. In other words, it is estimated as the sum total of gross value added at the market price.

\[
\text{Value of output produced by all producing units within the Domestic Territory (1)} - \text{Value of Intermediate Consumption (2)} = \text{GDP at Market Price [(1) – (2)]}
\]

**Difference between GDP and GNP**

\[
\text{GDP/I} = \text{NI} - \text{Net income from abroad.}
\]

The major difference between GNP and GDP is that the former includes net income from abroad whereas the latter includes only that income which has been produced within the political boundary of the nation.

Gross Domestic Product at factor cost or gross domestic income.

Gross Domestic Product at factor cost or gross domestic income is the sum total of the compensation of employees, operating surplus and mixed income earned by the factors of production in an accounting year plus depreciation or consumption of fixed capital.

Gross Domestic Product at factor cost can also be estimated by deducting net indirect taxes from gross domestic product at market price.

**Net National Product (NNP)**

In the process of production of goods and services, there will be some depreciation of fixed capital also called as consumption of fixed capital, if the value of depreciation is deducted from the value of gross national product in a year, we obtain the value of net national product.
Thus, NNP at market price is gross national product at market price minus depreciation.

\[
\text{GNP} - \text{Depreciation} = \text{NNP}
\]

**NNP at market price**

\[
\text{GNP at Market Price} - \text{Depreciation} = \text{NNP at Market Price}
\]

**NNP at Factor Cost**

Net National Product at factor cost is also called as national income. Net National Product at factor cost is equal to sum total of value added at factor cost or net domestic product at factor cost and net factor income from abroad.

\[
\text{NNP at Factor Cost} = \text{NNP at Market Price} - \text{Net Indirect tax}
\]

Income earned by factors of production though participation in the production process such as wages, salaries, rents and profits is also termed as National Income.

**Net Domestic Product at Market Price**

Net Domestic Product at market price is the market value of final goods and services produced by all the producers in the domestic territory of a country during an accounting year exclusive of consumption of fixed capital. It is equal to the net value added at market price.

**Net Domestic Income or Net Domestic Product at Factor Cost**

“NDI is the income generated in the form of wages, rent, interest and profit in the domestic territory of a country by all the producers (normal residents and non-residents) in an accounting year” (Hanson).

\[
\text{NDP at Factor Cost} = \text{NDP at Market Price} - \text{Indirect Tax} + \text{Subsidies}
\]

**Private Income**

Central Statistical Organization defines Private Income as “the total of factor income from all sources and current transfers from the government and rest of the world accruing to private sector” or in other words the private income refers to the income from socially accepted source including retained income of corporation.

\[
\text{NI} + \text{Transfer Payments} + \text{Interest on Public Debt} + \text{Social Security} - \text{Profit and Surplus Public Enterprises}
\]

**Personal Income**

Prof. Peterson defines Personal Income as “the income actually received by persons from all sources in the form of current transfer payments and factor income.”
National Income

Total income received by the citizens of a country from all sources before direct taxes in a year.

\[
\text{PI} = \text{Private Income} + \text{Undistributed Corporate Profits} - \text{Direct Taxes}
\]

Disposable Income

Prof. Peterson defined Disposable Income as “the income remaining with individuals after deduction of all taxes levied against their income and their property by the government.”

Disposable Income refers to the income actually received by the households from all sources. The individual can dispose this income according to his wish, as it is derived after deducting direct taxes.

\[
\text{DI} = \text{Personal Income} - \text{Direct Taxes} - \text{Miscellaneous receipts of the Government}
\]

Real Income

Goods and services produced in terms of money at current prices will not express/indicate real state often. Hence, real income is the national income expressed in terms of a general level of prices of a particular year, considered as the base year.

Per capita Income

Per capita Income is derived from dividing national income from the total population of the country.

\[
\text{PCI} = \frac{\text{NI}}{\text{Population}}
\]

POINTS TO REMEMBER

- National income is the sum total of all the incomes earned by a nation during a particular period of time.
- National income shows how the income is distributed between the wages, interest, profit and rents.
- National income is treated as an index of the economic activity of a nation. If national income reduces, the government will cut down the taxes so that citizens will have more income to spend.
- GNP is the measure of money income in which all kinds of goods and services produced in a country and net income from abroad, during one year are taken into consideration.
- Market price of only final products shall be taken into account, while measuring GNP.
- Goods and services rendered free of charge are not included in GNP.
- Transactions which do not arise from the production of current year are not included in GNP.
- Profits earned or losses incurred on account change in capital assets as a result of market fluctuation and illegal activities are not included in GNP.
- There are three approaches to estimate GNP namely,
  1. Income method
     Wages and Salaries + Rent + Interest + Dividends + Undistributed Corporate Profits + Direct Taxes + Mixed Income + Indirect Taxes + Depreciation + Net Income from Abroad.
2. Expenditure method
   Private Consumption Expenditure + Gross Domestic Private Investment + Government
   Expenditure on Goods and Services + Net Foreign Investment.

3. Value added method
   The money value of all final goods and services produced at current prices during a year is
   taken into account.

- GNP at market prices refers to gross value of final goods and services produced annually by
country plus net income from abroad.
- GNP at factor cost is the sum of the money value of the income produced by and accruing to the
various factors of production in one year in the country.
- National Income = C + I + G + (X – M) where C = Consumption, I = Investment, G = Government and
  X is Export and M is Import.
- NNP = GNP - Depreciation.
- Net National Product at market prices is the net value of final goods and services evaluated at
  market prices in the course of one country.
- Net National Product at factor cost is the net output evaluated at factor price. It includes income
  earned by factors of production.
- Domestic income or product income is generated by factors of production within the country from
  its own resources.
- Domestic income includes (1) Wages and Salaries (2) Rents including imputed house rents
  (3) Interest (4) Dividends (5) Undistributed capital profits including surplus of public sector
  undertakings (6) Mixed income consisting of profits of unincorporated firms, self employed persons,
  partnerships etc and direct taxes.
- Private income is obtained by private individuals from any source productive or otherwise and the
  retained income of corporations.
- Personal income is the total income received by the individuals of a country from all source prior
to direct taxes in one year.
- Disposable income or personal disposable income refers to the actual income which can be spent
  on consumption by individuals and families.
- Real income is nothing but the national income expressed in terms of a general level of prices of a
  particular year which is taken as base year.
- The average income of the people of a country in a particular year is called percapita income for
  that year.