National Income

- National Income provides a Comprehensive measure of the economic Activities of a nation.

- It denotes the Country's purchasing power.

- The growth of an economy is measured by the rate at which its real national income grows over time.

- National income thus serves as an instrument of economic planning.

- Further, national income is one of the most significant macroeconomic Variables.

- Thus, a clear understanding of the meaning, concepts, measurement and uses of national income is essential.

- Nobel laureate Simon Kuznets First introduced the concept of national Income

Meaning of National Income:

- In common parlance, National Income means the total money value of all Final goods and services produced in a Country during a particular period of time (one year).

Basic concepts of national Income:

The following are some of the Concepts used in measuring national Income.

- GDP
- GNP
- NNP
- NNP at factor cost
- Personal Income
- Disposable Income
- Per capita Income
- Real Income
- GDP deflator

Methods of Measuring:

- National Income all goods and Services produced in the Country must be counted and converted against Money value during a Year.

- Thus, whatever is produced is either used for consumption or for saving.

- Thus, national output can be computed at any of three levels, viz., Production, income and expenditure.

- Accordingly, there are three methods that are used to measure national income.

  - Production or value-added method

  - Income method or factor earning method

  - Expenditure method

- And if these methods are done correctly, the following equation must Hold
  Output = Income = Expenditure

- This is because the three methods are Circular in nature.

- It begins as production, through recruitments of factors of Production, generating income and going as incomes to factors of production.

Product Method:

- Product method measures the Output of the country.

- It is also called Inventory method.

- Under this method, the gross value of output from different Sectors like agriculture, industry, trade and commerce, etc., is obtained for the Entire economy during a year.

- The value Obtained is actually the GNP at market Prices.

- Care must be taken to avoid double Counting.

- The value of the final product is derived by the summation of all the Values added in the productive process.

- To avoid double counting, either the value of the final output should be taken intothe estimate of GNP or the sum of values Added should be taken.

- In India, the gross value of the farm Output is obtained as follows:

  - Total production of 64 agriculture Commodities is estimated.

  - The output of each crop is measured by multiplying the area sown by the average yield per Hectare.

  - The total output of each commodity is Valued at market prices.

- The aggregate value of total output of these 64 commodities is taken to Measure the gross value of agricultural Output.

- The net value of the agricultural output is measured by making deductions for the cost of seed, manures and Fertilisers, market charges, repairs and Depreciation from the gross value.

- Similarly, the gross values of the Output of animal husbandry, forestry, Fishery, mining and factory establishments Are obtained by multiplying their Estimates of total production with market Prices.

- Net value of the output in these Sectors is derived by making deductions for cost of materials used in the process of Production and depreciation allowances, Etc.

- From gross value of output.

- Net value of each sector measured in this way indicates the net contribution of the sector to the national income.

Precautions:

- The product method is followed in the underdeveloped countries, but it is less reliable because the margin of error in this method is large.

- In India, this method is applied to agriculture, mining and Manufacturing, including handicrafts.

  - Double counting is to be avoided under value added method.

  - Any Commodity which is either raw material or intermediate good for the final Production should not be included.

  - **For Example,** value of cotton enters value of yarn as cost, and value of yarn in Cloth and that of cloth in garments.

  - At Every stage value added only should be calculated.

  - The value of output used for self-Consumption should be counted while measuring national income.

  - In the case of durable goods, sale and Purchase of second hand goods (for Example pre owned cars) should not be Included.

Expenditure Method (Outlay method):

- Under this method, the total Expenditure incurred by the society in A particular year is added together.
- To calculate the expenditure of a society, it includes personal consumption Expenditure, net domestic investment, and Government expenditure on consumption as well as capital goods and net exports.

Symbolically,

$$GNP = C + I + G + (X-M)$$

C – Private consumption expenditure

I – Private Investment Expenditure

G – Government expenditure

X-M = Net exports

Precautions:

- **Second hand goods:** The expenditure Made on second hand goods should not be included.
- **Purchase of shares and bonds:** Expenditures on purchase of old shares and bonds in the secondary market Should not be included.
- **Transfer payments:** Expenditures Towards payment incurred by the Government like old age pension should Not be included.
- **Expenditure on intermediate goods:** Expenditure on seeds and fertilizers by farmers, cotton and yarn by textile Industries are not to be included to Avoid double counting. That is only Expenditure on final products are to be Included.

Income Method:

- The Income Method is one of the key approaches used to calculate a nation's National Income.
- It focuses on assessing the total income earned by individuals, businesses, and the government within an economy during a specific time period.
- This method provides insights into how the generated income is distributed among different factors of production, such as labor, capital, and land.

- By analyzing various sources of income, the Income Method offers a comprehensive view of the economic activity within a country.
- The method involves aggregating the different sources of income earned by various economic agents, including individuals, households, businesses, and the government.
- These sources of income include wages and salaries, rent, interest, profits, and taxes.

Gross Domestic Product (GDP):

- GDP is the total market value of final Goods and services produced within the Country during a year. This is calculated at market prices and is known as GDP at Market prices.
- Measured by central statistical office.
- Base year 2011 – 2012.
- GDP by expenditure method at Market prices = C + I + G + (X – M)
- Where C – consumption goods;

    I – Investment goods;

    G – Government purchases;

    X – Exports;

    M – Imports

(X – M) is net export which can be Positive or negative.

- Nominal GDP – Measuring at Current Prices without adjusting Inflation.
- Real GDP – Calculation of final goods and services at the base year prices.
- GDP at Market Price – Includes Direct Taxes and Subsidies.
- GDP at Factor Cost – Actual cost of production, doesn't include Indirect Taxes & It include Subsidies

Net Domestic Product (NDP):

- NDP is the value of net output of the economy during the year.
- Some of the Country's capital equipment wears out or becomes outdated each year during the Production process.

Net Domestic Product = GDP – Depreciation.

Gross National Product (GNP):

- GNP is the total measure of the flow of final goods and services at market Value resulting from current production in a country during a year, including netIncome from abroad.

- GNP includes five Types of final goods and services:

  - Value of final consumer goods and Services produced in a year to satisfy the immediate wants of the people which is referred to as consumption (C).

  - Gross private domestic investment in Capital goods consisting of fixed capital Formation, residential construction and inventories of finished and unfinished goods which is called as Gross investment (I).

  - Goods and services produced or Purchased by the government which is denoted by (G).

  - Net exports of goods and services, i.e., the difference between value of exports and imports of goods and services, known as (X-M); Net factor incomes from abroad which refers to the difference between factor incomes (wage, interest, profits) received from Abroad by normal residents of India and factor incomes paid to the foreign Residents for factor services rendered by them in the domestic territory in India (R-P).

  - GNP at market prices means the gross Value of final goods and services Produced annually in a country Plus net factor income from abroad (C + I + G + (X-M) + (R-P)).

  - GNP at Market Prices = GDP at Market Prices + Net Factor income from Abroad.

Net National Product (NNP) (at Market price):

- Net National Product refers to the Value of the net output of the economyDuring the year.

- NNP is obtained by Deducting the value of depreciation, or Replacement allowance of the capital assets from the GNP.

- It is expressed as,NNP = GNP – depreciation allowance. (Depreciation is also called as Capital Consumption Allowance)

NNP at Factor cost:

- NNP refers to the market value of Output.
- Whereas NNP at factor cost is the total of income payment made to factors of production.
- Thus, from the money value Of NNP at market price, we deduct the Amount of indirect taxes and add subsidies to arrive at the net national income at Factor cost.

NNP at factor cost = NNP at Market Prices – Indirect taxes + Subsidies.

Personal Income:

- Personal income is the total income Received by the individuals of a country from all sources before payment of direct taxes in a year.
- Personal income is never Equal to the national income, because the Former includes the transfer payments Whereas they are not included in national Income.
- Personal income is derived from national income by deducting Undistributed corporate profit, and Employees' contributions to social security Schemes and adding transfer payment.
- Personal Income = National Income - (Social Security Contribution and Undistributed corporate profits) + Transfer payments

Disposable Income:

- Disposable Income is also known as Disposable personal income.
- It is the Individuals income after the payment of Income tax.
- This is the amount available for households for consumption

Disposable Income = Personal income – Direct Tax.

- As the entire disposable income is not spent on Consumption,

Disposal income = consumption + saving.

Per Capita Income:

- The average income of a person of a Country in a particular year is called Per Capita Income.
- Per capita income is obtained by dividing national income by Population.

Per Capita income = National Income Population

Real Income:

- Nominal income is national income Expressed in terms of a general price level of a particular year in other words, real Income is the buying power of nominal Income.

- National income is the final Value of goods and services produced and expressed in terms of money at current Prices.

- But it does not indicate the real State of the economy.

- The real income is derived as follows:

Real Income at Constant price = National Income at Current price ÷ P1 / P0

P1 -Price index during current year;

P0 - Price index during base year

GDP deflator:

- GDP deflator is an index of price Changes of goods and services included in GDP.

- It is a price index which is calculated by dividing the nominal GDP in a given Year by the real GDP for the same year and multiplying it by 100.

GDP deflator = Nominal GDPX 100 Real GDP

Gross National Happiness Index (GNHI):

- The term "Gross National Happiness" Was coined by the fourth king of Bhutan, Jigme Singye Wangchuck, in 1972.

- It is an indicator of progress, which measures sustainable development, environmental conservation Promotion of culture and good Governance.

- On the basis of the level of economic development, nations are classified as developed and developing economies.

- Developed economies are those countries which are industrialised, utilise their Resources efficiently and have high per capita Income.

- The USA, Canada, U.K, France, and Japan are some of the developed economies. Developed economies are also termed as Advanced Countries.

- On the other hand, Countries which have not fully utilized their resources like land, mines, workers, etc.,

- And have low per capita income are termed as under developed economies. Examples of Underdeveloped countries are Sub Saharan Africa, Bangladesh, Myanmar, Pakistan, and Indonesia etc.
- They are also termed as Under Developed Countries or Backward Nations or Third World Nations.

Gross Capital Formation (GCF)

- Percentage of the investment made each year out of the total GDP is called GCF.
- High GCF indicates a higher rate of savings in the economy.
- It requires for high rate of production, capital formation, changes in production techniques.
- GCF = Capital formation in the public sector + private sector + household sector.

Purchasing Power Parity (PPP)

- The Economic size of the countries across the world can be compared either in terms of Nominal GDP or Purchasing Power Parity (PPP).
- **Comparison using Nominal GDP:** The Countries across the world measure their GDP size in terms of their own currencies. This makes cross country comparison difficult.
- Hence, in order to compare the GDP size of the countries, we need a common currency.
- Therefore, the GDP size of the countries are converted into dollars using the average exchange rates.

Importance of National Income Analysis:

- National income is of great Importance for the economy of a country. Nowadays the national income is regarded as accounts of the economy, which are Known as social accounts. It enables us
  - To know the relative importance of the Various sectors of the economy and Their contribution towards national Income;
  - From the calculation of national Income, we could find how income is Produced, how it is distributed, how Much is spent, saved or taxed.

- To formulate the national policies such as monetary policy, fiscal policy and other policies;

- The proper measures can Be adopted to bring the economy to the Right path with the help of collecting National income data.

- To formulate planning and evaluate Plan progress; it is essential that the data Pertaining to a country's gross income, Output, saving and consumption from Different sources should be available for Economic planning.

- To build economic models both in Short – run and long – run.

- To make international comparison, Inter – regional comparison and Inter – temporal comparison of growth of the economy during different periods.

- To know a country's per capita income Which reflects the economic welfare of The country (Provided income is equally Distributed)

- To know the distribution of income for Various factors of production in the Country.

- To arrive at many macro-economicvariables namely, Tax – GDP ratio, Current Account Deficit – GDP ratio, Fiscal Deficit – GDP ratio, Debt – GDP Ratio etc.

Difficulties in Measuring National Income:

- In India, a special conceptual Problem is posed by the existence of a Large, unorganised and non-monetised Subsistence sector where the barter System still prevails for transacting goods and services.

- Here, a proper valuation of Output is very difficult.

- Transfer payments Government makes payments in the form of pensions, unemployment Allowance, subsidies, etc.

- These are Government expenditure.

- But they are not included in the national income.

- Because they are paid without adding anything to the production processes.

- During a year, Interest on national Debt is also considered transfer payments because it is paid by the government to Individuals and firms on their past savings without any productive work.

Difficulties in assessing:

Depreciation allowance:

- The deduction of depreciation Allowances, accidental damages, repair and replacement charges from the national Income is not an easy task.

- It requires High degree of judgment to assess the Depreciation allowance and other charges.

Unpaid services:

- A housewife renders a number of Useful services like preparation of meals, Serving, tailoring, mending, washing, Cleaning, bringing up children, etc.

- She is not paid for them and her services are Not directly included in national income.

- Such services performed by paid servants are included in national income.

- The Reason for the exclusion of her services from national income is that the love and Affection of a housewife in performing her domestic work cannot be measured in monetary terms.

- Similarly, there are a Number of goods and services which are difficult to be assessed in money terms for the reason stated above, such as rendering Services to their friends, painting, singing, dancing, etc.

Income from illegal activities:

- Income earned through illegal Activities like gambling, smuggling, illicit Extraction of liquor, etc., is not included in national income.

- Such activities have Value and satisfy the wants of the people but they are not considered as productive from the point of view of society.

- Production for self-consumption and changing price farmers keep a large portion of food and other goods produced on the farm for Self-consumption.

- The problem is whether that part of the produce which is not sold in the market can be included in national Income or not.

- National income by product method is measured by the value of final goods and services at current market prices. But prices do not remain stable.
- They rise or fall.
- To solve this problem, economists calculate the real national income at a Constant price level by the consumer price Index.

Capital Gains:

- The problem also arises with Regard to capital gains.
- Capital gains arise when a capital asset such as a house, other Property, stocks or shares, etc.
- Is sold at higher price than was paid for it at the time of purchase.
- Capital gains are excluded from national income.

Statistical problems:

- There are statistical problems, too.
- Great care is required to avoid double counting.
- Statistical data may not be perfectly reliable, when they are compiled from numerous sources.
- Skill and efficiency of the statistical staff and Cooperation of people at large are also.