

**INDIAN ECONOMY | MODULE 1****NATIONAL INCOME**

- National income is the sum total of all final goods and services produced in a country in a particular period of time, usually one year.
- The 17<sup>th</sup> century English economist Sir William Petty was the first to calculate National Income.
- The first attempt to calculate national income of India was made by **Dadabhai Naoroji**. He estimated a National Income of Rs.340 crore and per capita income of Rs.20 in 1867-68.
- The first scientific method was made by Prof. **V.K.R.V. Rao** in 1931, but was not satisfactory.
- The first official attempt was made by National Income Committee headed by Prof. **P.C. Mahalanobis** in 1949.
- According to National Income Committee (1949), a National Income Estimate measures the volume of commodities and services turned out during a given period counted without duplication.
- In India, Central statistical Organization (CSO) is entrusted with the task of calculating National Income.
- According to National Income Committee Report (1954), National Income of India was Rs. 8710 and Per Capita Income was Rs. 225 in 1948 - 49.

**CONCEPTS OF NATIONAL INCOME****Gross Domestic Product (GDP)**

- It is the total money value of total goods and services produced within the geographic boundaries of the country during a given period of time.

**Gross National Product (GNP)**

- It is the total money value of total goods and services produced by the nationals of a country during a given period of time.

$$\text{GNP} = \text{GDP} + X - M$$

Where,

*X = Income earned and received by nationals working abroad*

*M = Income earned and received by foreigners working within a country.*

*The value of (X-M) is termed as **Net Foreign Income from Abroad (NFIA)***

**Net National Product (NNP)**

- Net National Product is obtained by deducting the depreciation value from GNP.

$$\text{NNP} = \text{GNP} - \text{Depreciation}$$

- NNP can be calculated in two ways: at market price or at factor cost.

***Difference between Factor cost and Market Price***

Factor cost is the money value required to produce a good or service. Market price is the price that end user has to pay to buy the product or services.

Usually taxes will be added and subsidies will be reduced from this factor cost to get market price. ( Market Cost = Factor Cost + Indirect Taxes - Subsidies)

**National Income (NI)**

- Net National product (NNP) calculated at factor cost is termed as National Income.
- NNP at Factor cost is obtained by deducting indirect taxes and adding subsidies in NNP at market price.

$$\text{NNP (at factor cost)} = \text{NNP (at market price)} - \text{Indirect taxes} + \text{Subsidies}$$

**Personal Income (PI)**

- Personal Income is the total amount of money income actually received by individuals of a country from all sources during a particular period.

**Personal Income (PI) = National Income - Undistributed profits of corporations - Payment for Social Security Provisions - Corporate taxes + Transfer Payments**

where,

**Undistributed profits of corporates** - A portion of profit which is kept with corporates to meet future expenditure.

**Payment for Social Security provisions** - Payments made by employees towards pension or provident fund.

**Transfer Payment** - Payments that are not made against any productive activity on the part of receiver (eg . old age pension, unemployment pension etc)

**Disposable Personal Income (DPI)**

- Disposable personal income is the income remaining with individuals after the deduction of all direct taxes levied against their income and property by the government.)

i.e.,  $\text{DPI} = \text{PI} - \text{Direct taxes}$

**Per Capita Income (PCI)**

- It refers to the average income per person of a Country

$$PCI = \frac{\text{National Income}}{\text{Total Population}}$$

- PCI is often used as a measure of the wealth of population of a nation.
- Goa has the highest Per Capita Income in India.

**Real and Nominal GDP**

- Nominal GDP is the total market value of the final production of goods and services within a country in a given period using that year's prices (also called "current prices")
- Real GDP adjusted for changes in the price level, using prices from a base year (constant prices) instead of "current prices"
- In India GDP at constant prices based on 2011-12 is known as Real GDP.
- GDP Deflator is the measure of change in price level in an economy during a period. It was calculated by comparing the prices of goods and services with that of a base year.

$$GDP\ DEFLATOR = \frac{NOMINAL\ GDP}{REAL\ GDP} \times 100$$

**INTRODUCTION OF GVA (2015)**

- The Government in January 2015 decided to analyze growth estimates using a new methodology based on GVA, revising the base year from 2004-05 to 2011-12.
- The concept of GVA at basic prices follows from the United Nation's System of National Accounts (SNA) introduced in 1993.
- GVA gives a picture of the state of economic activity from the producers' side or the supply side. GDP gives the picture from the consumers' side or the demand perspective.
- The **Gross Domestic Product (GDP) at factor cost** will no longer be discussed in the government documents and press releases while **GDP at market prices** will henceforth be referred to as GDP.
- GVA at factor cost is earlier called GDP at factor cost.

**How GVA is calculated?**

- Gross value added (GVA) is defined as the value of output less the value of intermediate consumption. It is used to measure the output or contribution of a particular sector.
- When such GVAs from all sectors ( $\sum$  GVA) are added together and adding taxes (product) and reducing subsidies (product), we can get the GDP (at market price).

- In the revision of National Accounts statistics done by Central Statistical Organization (CSO) in January 2015, it was decided that sector-wise estimates of Gross Value Added (GVA) will now be given at basic prices instead of factor cost.
- In simple terms, for any commodity the basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product.
- GVA at basic prices and GDP at market prices are obtained by this formula:

**GVA at basic prices** = GVA at factor cost + (Production taxes - Production subsidies)

**GDP at market prices** = GVA at basic prices + (Product taxes - Product subsidies)

- Gross Domestic Product (GDP) of any nation represents the sum total of gross value added (GVA) in all the sectors of that economy during the said year after adjusting for taxes and subsidies.

#### ***Difference between Production Tax and Product Tax***

- Production taxes/subsidies are independent of the quantity (volume) of production. It is often imposed even if the products are not produced (Eg: tax —land revenues, stamps fees, registration fees tax on the profession; subsidies — subsidies to Railways, input subsidies to farmers, subsidies to the village and small industries, administrative subsidies to corporations or cooperatives, etc.).
- Product taxes/subsidies depend on quantity produced. Product taxes or subsidies are paid or received on per unit of product (Eg: tax —excise tax, sales tax, service tax and import and export duties; subsidies — food, petroleum and fertiliser subsidies, interest subsidies given to farmers, households, etc)

#### **SWITCHING BACK TO GDP**

- RBI in April 2018, switched back to gross domestic product (GDP)-based measure to offer its growth estimates from the gross value added (GVA) methodology.
- Central Statistical Office (CSO) has started using GDP model as supply-side measure of economic activity as main measure of economic activities since 2018 January.
- Globally, the performance of most economies is gauged in terms of gross domestic product (GDP). This is also the approach followed by multilateral institutions, international analysts and investors.

**METHODS TO CALCULATE NATIONAL INCOME**

- ◆ There are mainly three methods to calculate National income: Product Method, Income Method, and Consumption Method.
- ◆ CSO uses the combination of these three methods to calculate the National Income of India.
  - **Product Method:** In this method, National Income is compiled by calculating net value of goods and services produced in a country during a period. To measure the national income from this method, the economy is divided into different sector like agriculture, industry, transport etc. Then, GDP is calculated by adding the money value of final goods and services product in these sectors.
  - **Income Method:** In this method National Income is compiled by calculating the net income earned by working people in various sectors and commercial enterprises.

$$\text{NI} = \text{Total wage} + \text{Total Rent} + \text{Total Interest} + \text{Total Profit}$$

- **Consumption Method (Expenditure Method):** In this method consumption expenditure of consumers (C), Consumption expenditure of investors which is called investment (I) and consumption of Government (G) are added. Sometimes net export (i.e, money value of export (X) less imports (M)) is added to this to get accurate figure.

$$\begin{aligned}\text{NI} &= \text{C} + \text{I} + \text{G} \\ \text{NI} &= \text{C} + \text{I} + \text{G} + (\text{X}-\text{M})\end{aligned}$$

**GROSS SAVINGS**

- Gross saving is disposable income less consumption. It can be calculated for each institutional sector and the total economy.
- Saving is closely related to investment. By not using income to buy consumer goods and services, it is possible for resources to instead be invested in productive capital, such as factories and machinery.
- Saving can therefore be vital to increase the amount of capital available, contributing to sustainable future economic growth.
- Gross Saving during 2016-17 is estimated as Rs. 45.73 lakh crore as against Rs. 43.02 lakh crore during 2015-16.
- The highest contributor to the Gross Saving is the household sector, with a share of 54.2 percent in the year 2016-17.

**GROSS CAPITAL FORMATION**

- When people save, they tend to invest. Gross capital formation is essentially net investment in an economy during a particular period, typically a year.

- It can be expressed as: Rate of Capital Formation = (Investments / GDP) X 100
- The capital formation is a must for achieving high rate of production, changes in production techniques and overall development of an economy.
- In India, Gross Capital Formation (GCF) at current prices is estimated as Rs. 46.71 lakh crore for the year 2016-17.
- The rate of capital formation in the years 2011-12 to 2016-17 has been higher than the rate of saving because of net capital inflow from Rest of the World (ROW).
- In terms of the share to the total GCF (at current prices), the highest contributor is Non-Financial Corporations with a share of 55.1 percent in 2016-17

**NATIONAL INCOME OF INDIA AND STATES**

- ◆ The estimates of National Income (measured as Net National Income) and Per Capita Income of the country during the last three years are given below.

<b>Year</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
Net National Income (Rs. Crore)	10953761	12076882	13408211	14710563
Per Capita Income (Rs)	86454	94130	103219	111782

**Net State Domestic Product (NSDP) of Indian states and Union Territories (as on 31.03.2017)**

Sl No	State/UT	NSDP (In crores) 2014-15	Per capita (2014 – 15)
1	Andhra Pradesh	469909	93699
2	Arunachal Pradesh	15410	103633
3.	Assam	178479	54618
4.	Bihar	345571	31380
5.	Chhattisgarh	211016	78001
6.	Goa	36290	242745
7.	Gujarat	789949	124678

8.	Haryana	395890	148485
9.	Himachal Pradesh	88196	124500
10.	Jammu& Kashmir	83217	62857
11	Jharkhand	198386	56737
12.	Karnataka	843918	132880
13.	Kerala	473045	139195
14.	Madhya Pradesh	429896	56182
15.	Maharashtra	1572037	134081
16.	Manipur	16189	52436
17.	Meghalaya	21838	68202
18.	Mizoram	10136	85659
19.	Nagaland	16137	78526
20.	Odisha	282322	64869
21.	Punjab	332999	114561
22.	Rajasthan	554783	76881
23.	Sikkim	13318	210394
24.	Tamil Nadu	970953	130197
25.	Telangana	462636	125832
26.	Tripura	27484	71666
27.	Uttar Pradesh	925437	43861
28.	Uttarakhand	142628	134784
29.	West Bengal	728974	78903
30.	Andaman & Nicobar Islands	5025	121954
31.	Chandigarh	25061	225369
32.	Delhi	447435	249004
33.	Puducherry	21776	158830