

# Methods to Calculate National Income

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Term Assignment

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CSE-D

## ■ METHODS TO CALCULATE ARE:

Factor  
Income

Value  
Added/  
Product

Final  
Expenditure

- National Income in India is **calculated by using combined method**. This is a combination of two methods- **product/output method and income method**.

## Some Basic Terms:

1. **GDP** - It measures the total value of national output of goods and service provided in a given time.
2. **NDP** - It is the money value of all final goods and services produced within the country after providing for depreciation.
3. **NNP** - It is the money value of all final goods and services of a country after providing for depreciation.
4. **GNP** - It is total money value of all final goods and services produced annually in a country plus net factor income from abroad.
5. **NFIA** - Factor income received from Abroad - Factor income paid to Abroad.

## Reports of Last 5 Years:



## Income Method:

It is also known as Factor Payment Method.

It is termed basically on the basis of supplier and owner of Factors of Production.

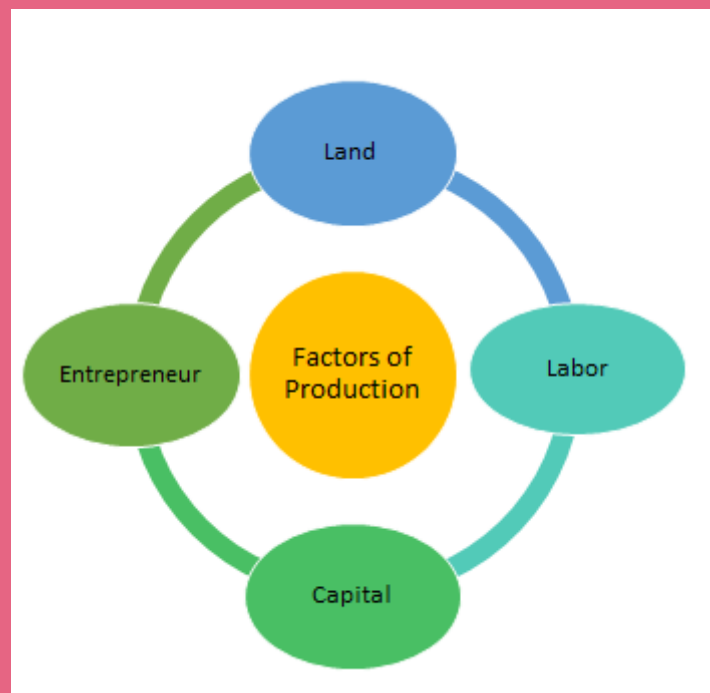
- ❖ It measures national income by the side of payments made to the factors of production in form of wages, rent, interest and profit for their services during an accounting year.

- ❖ It is calculated within the domestic economy during an accounting period.

## Primary Objective:

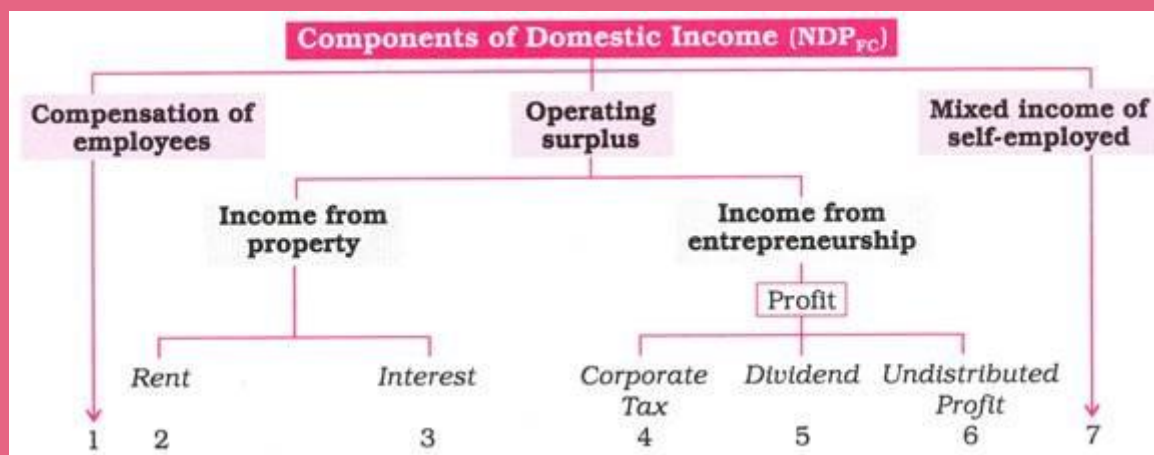
It is measured at the stage when incomes are paid out by enterprises to the owners of factors of production.

It measures based on the flow of factor revenues.



## Steps to be followed:

- Initially divide or segregate the production units on the basis of
  - Primary Sector
  - Secondary Sector
  - Tertiary Sector



- On the basis of factor payments to the factors of production that are:
  - Salaries/Wages/Social Security
  - Rent-Royalties-Interest
  - Divided Undistributed Profit
  - Mixed Income

- Compensation to employees.
- ❖ Sum up all the listed and if not some of them are not present take it as '0'.
- ❖ Rent-Interest-Profit together is called **Operating Surplus**.
- ❖ Similarly, "**Compensation to Employees**" include wages in Kind and Cash.
- By summing up in the previous step you will end up with the NDP(FC). Thus, by finally adding NFIA to the previous one we will have our NNP(FC).

## **Precautions:**

- Factor incomes by rendering productive services are included while excluding unemployment allowance, pension etc.
- Second-hand goods sales and purchase are excluded while commission paid to it is included.
- Value of Self-consumed services are not included.

- Lotteries, windfall gains and income by illegal activities are excluded.
- Wealth tax, gift tax excluded.
- Sales tax, excise duties are not included.

## **Value Added Method:**

It focuses on adding value to a product at each stage of production.

It is even called a Product Method or output or inventory method.

This method denotes the value added by each and every level starting from base level that is production to the final state.

## **Primary Objective:**

- primary objective is calculating the national income by taking into account the value added to a product during the various stages of production

## Steps:

1. Calculate **Gross Value added at Market Price** through dividing them into:
  - a. Primary Sector
  - b. Secondary Sector
  - c. Tertiary Sector
2. Here, **Gross value added at Market Price**  
**Gross Domestic Production** and **Value Added**  
are same at Market Price.
  - Value of Output - Intermediate Consumption
  - Where "**intermediate Consumption**" accommodates Domestic Purchase and Imports.
  - Similarly, "**Value of Output**" accommodates Sales (Price x Quantity) and change in Stocks and export too.



- Here value of Output stands for market value of goods produced by a firm during financial year.
- Similarly, intermediate goods are non-factor in nature.
- Here  $GDP(MP) = \sum \text{value added}$
- Similarly,  $NDP(MP) = \sum \text{net value added}$

### 3. $NNP(FC) = GDP(MP) + NFIA - \text{depreciation} - (\text{Net Indirect Tax})$

- Here adding NFIA changes it to  $GNP(MP)$ .
- Then subtracting depreciation turns it to  $NNP(MP)$ .
- Finally, subtracting NIT changes it to  $NNP(FC)$ .

Producers	Stages of Production	Selling Price	Cost Price	Value Added
Farmers	Wheat	80	0	80
Millers	Flour	100	80	20
Baker	Bread	120	100	20
Total		300	180	120

- ❖ Value Added includes the contribution of each stage of production, hence it **eliminates the Double-counting error**.

### **Precautions:**

- Intermediate goods should not be calculated while calculating National Income.
- Dealings of 2<sup>nd</sup> hand goods should not be calculated.
- Self-consumption services should be abandoned as they are termed as non-market transaction.
- The estimated values of houses owned by individual should be calculated as they possess the mark as imputed rents.

### **Expenditure Method:**

It is called "**INCOME DISPOSAL METHOD**".

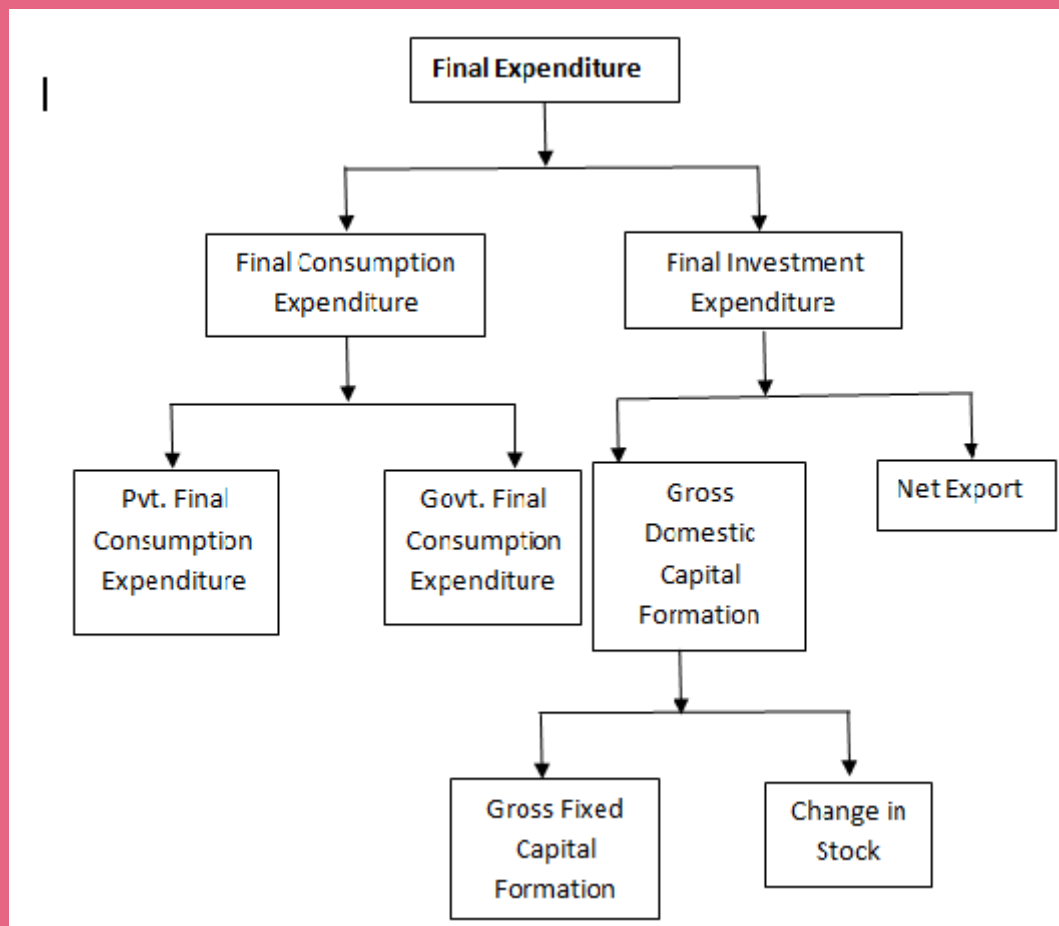
It is a method used for determining the GDP of country. This calculates the Annually produced Goods and Service Expenditure.

### **Primary Objective:**

- It is the most common way to calculate GDP as it includes both public and private sector expenses bounded within the nation's borders.

### **Drawbacks:**

- ❖ It can only be used to calculate nominal GDP, which is not adjusted for inflation.



## Steps:

1. Here initially you have to segregate into 4 sectors i.e.
  - Household
  - Producer
  - Government
  - World

2. There are primarily 4 different types of **aggregated expenses** that are utilised to determine GDP:
  - A. Gross domestic Consumption by producer
  - B. Government expenses on goods and services.
  - C. Final consumption expenditure of Household sector.
  - D. Net Export.
3. Now, summing up all the sectors from the above state leads to GDP(MP) which equals to **Gross Domestic Expenditure**.
4. Thus, on adding NFIA leads to GNP(MP) which in turn equals to Gross National Expenditure.
5. Finally, by subtracting depreciation we get NNP(MP) and thus, **subtracting Net Indirect Tax** we get NNP(FC).

## Precautions:

- Any intermediate goods cannot be considered as it leads to double counting.
- No transfer payments are included.
- Purchase of second-hand goods are not included while brokerage paid to it is included.
- Share, bonds and debentures are not included.
- While brokerage earned on trading of share is included.
- Imputed values of occupied residential units are also included.

## References:

<https://www.vedantu.com/commerce/expenditure-method>

<https://www.vedantu.com/commerce/income-method>

<https://byjus.com/commerce/the-product-or-value-added-method/>