

UPSC PATHSHALA

ECONOMY



Introduction

National Income Accounting is a macroeconomic concept. It assesses the level of economic activity which is crucial for any economy since it determines the number of goods and services produced in the country in a particular year. A country's level of production is a measure which determines the health and strength of the economy. National Income gives us an insight of the country's economic activity. These aggregates give a clear outlook of a country's fiscal health.

The concept of National Income is very similar to the concept of household budget. You must be familiar that in every household, there are three components namely sources of income, expenses incurred and total savings. These estimates guide the households to form a budget and take financial decisions. Similarly, national income estimates provide a clear picture of the expenses that the government can undertake given the revenue received in that particular year.

In this article, you should understand the different ways in which National Income is calculated, the scope of the terms GDP, GNP, NNP, NDP, their difference and their usage at both factor cost and market prices.



What is National Income?

National Income of a country is the total market value of all final goods and services produced in a fiscal year. It is the net output of all economic activities of a country during a given financial year and is valued in terms of money. Measuring National Income is not as easy as measuring household income. To measure it accurately, there should be no over counting. All goods and services produced in any given year must be counted only once. To avoid double counting, the estimates consider only the market value of final goods and services. It does not include the transactions involving intermediate goods.



National Income Accounting

National Income Accounting is a method or technique used to measure the economic activity of a country as a whole.

What is NIA is mainly done for?

Policy Formulation:

It helps in comparing the estimates of the past from the future and also forecast the growth rates in future. For example, if a country has a GDP of Rs. 103 Lakh which is 3 Lakh rupees higher than last year with a growth rate of 3 percent.

Effective Decision Making:

To estimate the contribution of each of the sectors of the economy. It helps the business to plan for production.

International Economic Comparison:

It helps in comparing the level of development of countries and provides useful insight into how well an economy is functioning, and where the money is being generated and spent. One can compare the standard of living of different nations and its growth rate.

What are the various terms associated with measuring of National Income?



GDP (GROSS DOMESTIC PRODUCT)

Here the catch word is Domestic which refers to Geographical Area.

The total value of all final goods and services produced within the boundary of the country during a given period of time (generally one year) is called as GDP.

In this case, the final produce of resident citizens as well as foreign nationals who reside within that geographical boundary is considered.

GDP=Q-P

Q = total quantity of final goods and services produced in the country (both by Indians and foreigners residing within Indian borders)

P = final price of goods and services

Types of GDP: Real GDP and Nominal GDP

Real GDP:

Refers to the current year production of goods and services valued at base year prices. Such base year prices are Constant Prices.

Nominal GDP:

Refers to current year production of final goods and services valued at current year prices.

Which one is a better measure?

Real GDP is a better measure to calculate the GDP because in a particular year GDP may be inflated because of high rates of inflation in the economy.

Real GDP therefore allows us to determine if production increased or decreased, regardless of changes in the inflation and purchasing power of the currency.

Concept of Base Year:

It is the year used as the beginning or reference year for constructing an index, and which is usually assigned an arbitrary value of 100.

The base year is also known as Rebasing as by every 10 years there is change which will be minimum 4% rise in price of items which requires changing the base year.

Economists use a price index to find the real GNP/GDP to make the calculation of GNP/GDP easier. A Price index is a number showing the changes in the overall level of prices. It shows a change in general price level of an economy.

Recently the Indian Government changed the base year for calculating the GDP to 2011-12 from 2004-2005. Base Year selection is made on the basis of:

- Stability of macroeconomic parameters. It has to be a normal year without large fluctuations in production, trade and prices of goods and services.
- Data availability: Data available for the year should be reliable.
- Comparability: So that same parameters should be in use both the years. Therefore it should be a recent year and not go long back into history

GROSS NATIONAL PRODUCT (GNP)

Here the catch word is National which refers to all the citizens of a country.

GNP is the total value of the total production or final goods and services produced by the nationals of a country during a given period of time (generally one year).

In this case, the income of all the resident and non-resident citizens (who resides abroad) of a country is included whereas, the income of foreigners who reside within India is excluded.

The GNP constitutes of the income earned by Indian Nationals (both in Indian Territory and Abroad) only.

GNP=GDP+(X-M)

X = Export

M = Import

X-M is called the Net Factor Income from Abroad (NFIA) So, **GNP=GDP+ Net Factor Income from Abroad**

Market Price v/s Factor Cost

GDP and GNP are measured on the basis of Market Price and Factor Cost.

Market Price	Factor Cost
It refers to the actual transacted price which includes indirect taxes such as customs duty, excise duty, sales tax, service tax etc. (impending Goods and Services Tax). These taxes tend to raise the prices of the goods in an economy.	It is the cost of factors of production i.e. rent for land interest for capital, wages for labour and profit for entrepreneurship. This is equal to revenue price of the final goods and services sold by the producers.

Revenue Price (or Factor Cost) = Market Price – Net Indirect Taxes Net Indirect Taxes = Indirect Taxes – Subsidies Hence, Factor Cost = Market Price – Indirect Taxes + Subsidies

Concept of Depreciation

You must have come across the phrase "Buying a depreciating asset is a poor investment decision." Depreciation is fall in the value of goods over a period of time. Car, household furniture or electronics are examples of depreciating assets because their monetary value reduces over time. The resale value of a mobile phone, furniture or a car is less than the price at which it was bought by the consumer. The amount by which the value of the good is reduced is called the cost of depreciation.

In the process of production some capital such as equipment, machines get worn out over a period of time which leads to gradual decrease in its economic value. This is called capital depreciation.

Net National Product (NNP): NNP = GNP – Depreciation

- It is calculated by subtracting Depreciation from Gross National Product.
- Depreciation Wear and Tear of goods produced.
- This deduction is done because a part of current produce goes to replace the depreciated parts of the products already produced. This part does not add value to current year's total produce. It is used to keep the products already produced intact and hence it is deducted.

Net Domestic Product (NDP): NDP = GDP – Depreciation

- It is the calculated GDP after adjusting the value of depreciation. This is basically, Net form of GDP, i.e. GDP – total value of wear and tear.
- NDP of an economy is always lower than its GDP, since their depreciation can never be reduced to zero. The concept of NDP and NNP are not used to compare different economies because the method of calculating depreciation varies from country to country.

National Income at Factor Cost (NIFC)

It is the sum of all factors of income earned by the residents of a country (Indian) both from within the country as well as abroad.

National Income at Factor Cost = NNP at Market Price – Indirect Taxes + Subsidies

In India, and many developing countries across the world, National Income is measured at factor cost instead of market prices.

Transfer Payments

A payment made by the government to individuals for whom there is no economic activity is produced in return. For example: Old Age Pensions, Scholarship etc.

Personal Income

- It refers to all of the income collectively received by all of the individuals or households in a country.
- It includes compensation from a number of sources including salaries, wages and bonuses received from employment or self employment; dividends and distributions received from investments; rental receipt from real estate investments and

profit sharing from businesses.

- In National Income Accounting, some income is attributed to individuals, which they do not actually receive. For Example: Undistributed Profits, Employees contribution for social security, corporate income taxes etc. which needs to be deducted from National Income to estimate the Personal Income.
- PI = NI + Transfer Payments Corporate Retained Earnings, Income Taxes, Social Security Taxes.

Disposable Personal Income

- It is the amount left with the individuals after paying Personal Taxes such as Income Tax, Property Tax, and Professional Tax etc. to spend as they like.
- DPI = PI Taxes (Income Tax i.e. Personal Taxes)
- DPI results into Savings and Expenditure i.e. (Spend and Save).
 This concept is very useful for studying and understanding the consumption and saving behaviour of the individuals.

Factors Affecting National Income

Several factors affect the national income of a country. Some of them have been listed below:

FACTORS OF PRODUCTION:

Normally, the more efficient and richer the resources, higher will be the level of National Income or GNP



Resources like coal, iron and timber are essential for heavy industries so that they must be available and accessible. In other words, the geographical location of these natural resources affects the level of GNP.



Capital is generally determined by investment. Investment in turn depends on other factors like profitability, political stability etc.



The quality or productivity of human resources is more important than quantity. Manpower planning and education affect the productivity and production capacity of an economy.





Government can help to provide a favourable business environment for investment. It provides law and order, regulations.



This factor is more important for Nations with fewer natural resources. The development in technology is affected by the level of invention and innovation in production.



Political Stability:

A stable economy and political system helps in appropriate allocation of resources. Wars, strikes and social unrests will discourage investment and business activities.

Methods of National Income Calculation

There are three approaches and methods of measuring National Income:

1 Income Method

By this National Income is calculated compiling income of factors of production viz., land, labour, capital and entrepreneur.

National Income = Total Wage + Total Rent + Total Interest + Total Profit

In Indian context, since 1993 as per the System of National Accounts (SNA), National Income is the total of the following:

GDP = Compensation of Employees + Consumption of Fixed Capital + (Other Taxes on Production – Subsidies of Production) + Gross Operating Surplus

- Compensation of employees: (Wage) salaries paid in cash and kind and other benefits provided to employees.
- Consumption of Fixed Capital: wear and tear of machinery which are replaced by new parts.
- Other Taxes on Production minus Subsidies: Net taxes on production.
- There is a difference between tax on products and tax on production. Taxes on products include taxes like sales tax and excise duty. Tax on production is tax imposed irrespective of production like license fees and land tax.
- Gross Operating Surplus: balance of value added after deducting the above three components. It goes to pay rent of land and interest of capital.

2 Product Method (or Value Added Method, Output Method)

- It is used by economists to calculate GDP at market prices, which are the total values of outputs produced at different stages of production.
- In order to avoid double counting, only the value of the final goods and services are considered.
- The monetary value of the intermediary goods are not taken into account.

Gross Value Added = Output of Final Goods and Services – Intermediate Consumption.

National Income = Gross Value Added + Indirect Taxes - Subsidies

What are the goods and services included in production?

- Goods and services actually sold in the market.
- Goods and services not sold but supplied free of cost. (No Charge/Complementary).

National Income / Methods of National Income Calculation

What are the goods and services not included in production?

- Second hand items and purchase and sale of the same. Sale and purchase of second cars, for example, are not a part of GDP calculation as no new production takes place in the economy.
- Production due to unwarranted/ illegal activities.
- Non-economic goods or natural goods such as air and water.
- Transfer Payments such as scholarships, pensions etc. are excluded as there is income received, but no good or service is produced in return.
- Imputed rental for owner-occupied housing is also excluded.
- Here the Gross Value of final goods and services produced in a country in certain year is calculated.
- GDP is a concept of value added; it is the sum of gross value added of all resident producer units (institutional sectors, or industries) plus that part of taxes (total) less subsidies, on products which is not included in the valuation of output.

3 Expenditure Method

- It measures all spending on currently-produced final goods and services only in an economy.
- In an economy, there are three main agencies which buy goods and services: Households, Firms and the Government.

What are the four major components of final expenditure? Consumption (C)

Personal Consumption made by households, the payment of which is paid by households directly to the firms which produced the goods and services desired by the households.

Investment Expenditure (I)

Investment is an addition to capital stock of an economy in a given time period. This includes investments by firms as well as governments sectors.

Government Expenditure (G)

This category includes the value of goods and service purchased by Government. Government expenditure on pension schemes, scholarships, unemployment allowances etc. are not included in this as all of them come under transfer payments. National Income / Methods of National Income Calculation

Net Exports (X-IM)

Expenditures on foreign made products (Imports) are expenditure that escapes the system, and must be subtracted from total expenditures. In turn, goods produced by domestic firms which are demanded by foreign economies involve expenditure by other economies on our production (Exports), and are included in total expenditure. The combination of the two gives us Net Exports.

National Income = Consumption (C) + Investment Expenditure (I) + Government Expenditure (G) + Net Exports (X-IM)

Calculating GDP (National Income) is extremely important as the performance of the economy is fixed by means of this method. The results would help the country to forecast the economic progress, determine the demand and supply, understand the buying power of the people, the per capita income, the position of the economy in the global arena. The Indian GDP is calculated by the expenditure method.

New Methodology for Calculation of GDP in India

Earlier domestic GDP was calculated at factor or basic cost, which took into account pieces of products received by producers.

The new formula takes into account market prices paid by consumers. It is calculated by adding GDP at factor price and indirect taxes (minus subsidies). It is in line with international practice and is expect4ed to better capture the changing structure of the Indian economy.

The government has also changed the base year for estimating the GDP from 2004-05 to 2011-12. This has been done to incorporate the changing structure of the economy, especially rural India.

Data for the new GDP series will now be collected from 5 lakh companies (against 2500 companies earlier. Under-represented and informal sectors as well as items such as smartphones and LED television sets will now be taken into account to calculate the gross domestic product. National Income / Methods of National Income Calculation The revision in GDP does not alter the size of India's economy (\$1.8 trillion) nor will it alter key ratios such as fiscal deficit, CAD etc., (as percentage of GDP) for 2013-14.

The GDP at the aggregate and sector level has significantly changed. The average share of the industrial sector has moved up by 5.6 percentage points from 26.1 per cent in the old series to 31.7 per cent under the new series, for 2011-12 to 2013-14.