Terms and Terminology related to National Income

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Basic Terms
National Income

- Final Goods
- Intermediate Goods [material inputs]
  ↳ raw materials
- Depreciation - annual allowance for weare and teare of capital goods

$$\frac{\text{Cost of the goods}}{\text{No. of yrs of its useful life}}$$

- Market Price - actual transacted price
  - indirect taxes
    ↳ excise duty, VAT, service tax, customs duty etc, govt. subsidies.
- Factor Cost: Total cost involved in producing a good or a service.
  ↳ Govt. grants + subsidies.
  [exclude indirect taxes]
- Purchasing Power Parity (PPP). -

- Base Year / Index Year. -
- Transfer Payments. - gifts, donations, old age pension. scholarships . . .

pension to retired employees not a transfer payment.

- Nominal GDP. - GDP at Current market price.
- Real GDP. total market value. of goods and services produced. measured in constant price or at base year price

[GDP at constant prices < GDP at current prices.]
[Real GDP] [Nominal GDP]

- Net Factor Income from Abroad. -

difference

Factor income. (rent, wages, interest, profit). normal residents.

- Factor income [earned by non-residents and overseas companies within our country]

Calculation of National Income.

National Income (NI)

1st April — 31st March.

National Income Committee (1949).

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

C — Total Consumption Expenditure

I — Total Investment Expenditure

G — Total Govt. expenditure

X — Export

M — Import

Measures of National Income.

1. Gross Domestic Product (GDP).

$$GDP = C + I + G.$$

GDP at Market Price

GDP_{MP}

$$GDP_{MP} = GDP_{FC} + (\text{Indirect Taxes} - \text{Subsidies}).$$

GDP at Factor Cost

GDP$_{FC}$.

production units = factory level.

govt. grants + govt. subsidies.

[exclude indirect taxes]

$GDP_{FC} = GDP_{MP}$ — Indirect Tax + Subsidy.

Calculation of GDP in India.

National Statistical Agency.

National Statistics Office (NSO).

For international standards,

→ System of National Accounts, 1993.

↳ IMF, EC, OECD, UN, World Bank.

Gross Value Added (GVA).

In 2015,

value of output — the value of intermediate consumption.

GVA = GDP + Subsidies on Products — Taxes on Products.

GNP

All the output of the residents / nationals of a country.

$$GNP_{(FC/MP)} := GDP_{(FC/MP)} + X - I$$

X — Income Earned and Received by Indians working abroad

I — Income earned and Received by Non Indians in India.

Net Domestic Product (NDP)

$$NDP_{(FC/MP)} = \text{Gross Domestic Product}_{(FC/MP)} - \text{Depreciation.}$$

Net National Product (NNP)

$$NNP_{(FC/MP)} = GNP_{(FC/MP)} - \text{Depreciation.}$$

$NNP_{(FC)}$ — Real National Income of India.

Per Capita Income (PCI).

city, region, country,] in a specified year.

avg. income earned per person.

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

Green Gross Domestic Product (GGDP)

net natural capital consumption

↳ [resource depletion, environmental degradation.

protective and restorative environmental initiatives.]

substracted from GDP.

✓ Product Method.

GDP = Value of Output − Intermediate Consumption.

Consumption.

Income Method.

National Income (NI) = (Total rent - Income from land)

+ (Total wages - Income from Labour)

+ (Total Interest - Income from capital)

+ (Total Profit - Income from entrepreneur).

Consumption Method.

NI = Total consumption expenditure + Total savings.

Basic Terms Used in National Income and Accounting

Final Goods -Such goods that are meant for final use and will not pass through any more stages of production or transformations,

Intermediate Goods- Such goods are used by other producers as material inputs. These are mostly used as raw material or inputs for production of other commodities.

Depreciation It represents how much of an assets value has been used. It is an annual allowance for wear and tear of capital goods. In other words, it is the cost of the goods divided by the number of years of its useful life.

Market Price It refers to the actual transacted price and it includes indirect taxes such as excise duty, Value Added Tax (VAT), service tax, customs duty, etc and government subsidies.

Factor Cost It means the total cost of all factors of production consumed or used in producing a good or service. It includes government grants and subsidies, but it excludes indirect taxes.

Purchasing Power Parity (PPP) It is an analysis metric to compare economic productivity and standards of living between two different countries. The PPP exchange rates are constructed to ensure that the same quantity of goods and services are priced equivalently across countries. Base Year It is the year against which the performance of an is measured. It is also called the reference year.

Transfer payments are all those unilateral payments corresponding to which there is no value addition in the economy. Examples include gifts, donations, old age pension, scholarships, etc. However, pension to retired employees is not a transfer payment as the services were already rendered by them before retirement. Transfer payments are not included in national income.

Nominal GDP Nominal GDP is GDP estimated at current market prices. Therefore, nominal GDP includes all changes in market prices that have occurred during the current year due to inflation or deflation.

Real GDP It is the total market value of goods and services produced, measured in constant price or at base year prices, GDP at constant prices (real GDP) is generally less than the GDP at current prices (nominal GDP).

Net Factor Income from Abroad (NFIA) It is the difference between factor income (rent, wages, interest and profit) earned by our normal residents from the rest of the world and factor income earned by non-residents and overseas companies within our country.

If NFIA is positive, GNP would be greater than GDP and if NFIA is negative, GNP would be less than the GDP.

Calculation of National Income

National Income (NI) measures the net value of goods and services produced in a country during a year and it also includes Net Factor Income from Abroad (NFIA). National Income measures the productive power of an economy in a given period to turn out goods and services for final consumption. In India, National Income estimates are related to the financial year (1st April to 31st March).
According to the National Income Committee (1949). National Income estimate measures the volume of commodities and services turned out during a given period without duplication.

National Income =C+I+G+(X-M)

Where, C = Total Consumption Expenditure

I = Total Investment Expenditure

G=Total Government Expenditure

X = Export

M = Import

GDP at Market Price (GDP MB)

the total value of all the goods and services at market price produced during a year within the geographical boundaries of the country.

Market price refers to the actual transacted price and it excise duty, VAT, includes indirect taxes such as customs duty, etc.

GDPMP = GDPFC + (Indirect Taxes-Subsidies)

GDP at Factor Cost (GDPFC)

GDP at factor cost is the total value of goods and commodities produced in a year in a country by its all production units (factory level). It includes government grants and subsidies, but it excludes indirect taxes

GDP FC = GDP MP-Indirect Tax + Subsidy

Calculation of GDP in India

GDP in a country is usually calculated by the National Statistical Agency, which compiles the information from large number of sources.

In the case of India, it is the National Statistics Office (NSC) which estimates GDP.

The international standards for measuring GDP are obtained from the System of National Accounts, 1993, compiled by the International Monetary Fund (IMF), the European Commission (EC), the Organisation for Economic Cooperation and Development (OECD), the United Nations (UN) and the World Bank.

2. Gross Value Added (GVA)

In 2015, India opted to make major changes to its compilation of national accounts and decided to bring the whole process into conformity with the United Nation's System of National Accounts (SNA) of 2008.

As per the SNA, GVA is defined as the value of output minus the value of intermediate consumption and is a measure of the contribution to growth made by an individual producer, industry or sector.

It provides the rupee value for the number of goods and services produced in an economy after deducting the cost of inputs and raw materials that have gone into the production

Gross Value Added = GDP + Subsidies on Products - Taxes on Products

Earlier, India had been measuring GVA at 'factor cost till the new methodology was adopted, in which GVA at "basic prices" became the primary measure of economic output.

GVA at basic prices will include production taxes and exclude production subsidies. GVA at factor cost included no taxes and excluded no subsidies.

The base year from 2004-05 has also been shifted to 2011-12.

3. Gross National Product (GNP) It counts all the output of the residents/nationals of a country. So, if an Indian owned company has a factory in the United Kingdom, the output of that factory would be included in UK GDP, not in Indian GDP.

However, while measuring GNP, the output of the Indian owned factory in the UK would be included in India's GNP. Thus, while calculating GNP, the Net Factor Income from Abroad will be included.

GNP (FC/MP) =GDP (FC/MP) +X-1

Where,

X = Income Earned and Received by Indians

Working Abroad

I = Income Earned and Received by Non-Indians in India

Note Gross National Product (GNP) is the total value of final goods and services, produced in an economy in a year, by the ordinary residents of the country. The income of normal residents is included in GNP

4. Net Domestic Product (NDP)

If the depletion of the capital stock (Depreciation), is subtracted from GDP, Net Domestic Product (NDP) is obtained. The difference between Gross and Net Domestic Product occurs because of depreciation. In terms of value addition, the summation of Net Value Added (NVA) of all firms is called Net Domestic Product (NDP).

NDP (FC/MP) = Gross Domestic Product (FC/MP) - Depreciation

5. Net National Product (NNP)

If we deduct depreciation from GNP, the measure of aggregate income will give NNP.

NNP (FC/MP) = Gross National Product (FC/MP) - Depreciation

Note NNP at factor cost gives us the Real National Income of India.

6 . Per Capita Income (PCI)

Per Capita Income (PCI) measures the average income earned per person in a given area (city, region, country, etc.) in a specified year.

It is calculated by dividing the area's total income by its total population. Per Capita Income is national income divided by population size.

Per Capita Income (PCI)= National Income/Total Population

7. Green Gross Domestic Product (GGDP)

It is an index of economic growth with the environmental consequences of that growth factored into a country's conventional GDP. Green GDP monetises the loss of biodiversity and accounts for costs caused by climate change.

Calculation of Green GDP requires net natural capital consumption including resource depletion, environmental degradation and protective and restorative environmental initiatives, be subtracted from traditional GDP.
GDP.

Various Methods of Measuring National Income

According to Simon Kuznets, National Income Accounting of a country is calculated by the following three methods:

1. Product Method

This method of National Income Accounting calculates the aggregate value of final goods and services produced in a year.

GDP = Value of Output - Intermediate Consumption

The Gross Domestic Product (GDP) of an economy is arrived at by measuring the aggregate value of goods and services produced in a year.

Further deducting the aggregate amount of depreciation, across all firms in an economy, gives us the Net Domestic Product (NDP).

2. Income Method

In this method, a sum of net income earned by working people in different sectors and commercial enterprises is obtained. Incomes of both categories of people, tax-paying and non-tax-paying, are added to obtain National Income.

It is calculated by measuring the aggregate level of income, rent, interest and profits by the respective factors of production of an economy.

National Income (NI) = (Total rent-Income from land) + (Total wages-Income from labour) + (Total interest-Income from capital) + (Total profit-Income from entrepreneur).

3. Consumption Method

In this method, income is either spent on consumption or saved.

Hence, National Income is the addition of total consumption and total savings. It is also called the Expenditure Method.

NI= Total Consumption Expenditure + Total Savings

Other Variants of National Income

Personal income (PI) It is the sum of all types of factor income, actually received by the households and current transfers. Personal income is the aggregate of earned and unearned income. Some part of the profits (also known as corporate saving), is retained by the firms as undistributed profits.

Personal Income = National Income - Undistributed Profits of Corporations-Payments for Social Security Schemes - Corporate taxes + Transfer Payments + Net Interest paid by the Government

Personal Disposable Income (PDI) It is the income that remains with the individuals and households after deduction of all taxes levied against their income and their property by the government.

PDI = PI-Direct taxes - Miscellaneous fees and fines paid by the households.

National Disposable Income (NDI) National disposable income is the income from all sources (abroad), available to the residents of a country, for consumption expenditure or for saving during a year.

NDI = National Income + Net Indirect Taxes + Net current transfers from rest of the world.

Net/Gross National Disposable Income This income is equal gross national income minus current transfers payable to non-resident units plus current transfers receivable by resident from the rest of the world.

Net National Disposable Income = Gross National Disposable Income-Current replacement cost (which is

depreciation at the level of economy as a whole). Resident from the rest of the world

National Income at Current Prices It is the money value of country in a year, measured at the prices of the current year.
National Income at Constant Prices It is the money value of final goods and services produced by normal residents of a country in a year, measured at base year price.

GDP Deflator Also called implicit price deflator, is a measure of inflation. It is defined by formula as GDP Deflator or Price Index = Nominal GDP/Real GDP Rs.100