## **Gross Domestic Product (GDP)**

**GDP**, or gross domestic product, is the market value of the final goods and services produced within a country in a given time period.

This definition has four parts:

■ Market value

■ Final goods and services

■ Produced within a country

■ In a given time period

**GDP** refers to the monetary value of final goods and services—that is, those that are bought by the final user—produced in a country in a given period of time (say a quarter or a year). It counts all of the output generated within the borders of a country.

**GDP** is the total value of goods and services produced within the country during a year. This is calculated at market prices and is known as *GDP* at market prices.

$$GDP = Consumption + Investment + Government Spending + Net Exports Or,  $GDP = C + I + G + NX$$$

#### Where,

- ✓ Consumption (C) represents private-consumption expenditures by households and nonprofit organizations,
- ✓ Investment (I) refers to business expenditures by businesses and home purchases by households,
- ✓ Government spending (G) denotes expenditures on goods and services by the government, and
- ✓ Net Exports (NX) represents a nation's exports minus its imports.

**Dernberg** defines GDP at market price as "the market value of the output of final goods and services produced in the domestic territory of a country during an accounting year."

# Different ways/ approaches to measure GDP

There are three different ways to measure *GDP*:

- ✓ Product Method,
- ✓ Income Method, and
- ✓ Expenditure Method.

These three methods of calculating *GDP* yield the same result because National Product = National Income = National Expenditure.

#### 1. The Product Method.

In this method, the value of all goods and services produced in different industries during the year is added up. This is also known as the value added method to *GDP* or *GDP* at factor cost by industry of origin. The following items are included in India in this: agriculture and allied services; mining; manufacturing, construction, electricity, gas and water supply; transport, communication and trade; banking and insurance, real estates and ownership of dwellings and business services; and public administration and defence and other services (or government services). In other words, it is the sum of gross value added.\*

## 2. Expenditure Method.

This method focuses on goods and services produced within the country during one year.

*GDP* by expenditure method includes:

- (i) Consumer expenditure on services and durable and nondurable goods (C),
- (ii) Investment in fixed capital such as residential and non-residential building, machinery, and inventories (I),
- (iii) Government expenditure on final goods and services (G),
- (iv) Export of goods and services produced by the people of country (X),
- (v) Less imports (M).

That part of consumption, investment and government expenditure which is spent on imports is subtracted from *GDP*.

Similarly, any imported component, such as raw materials, which is used in the manufacture of export goods is also excluded.

Thus GDP by expenditure method at market prices = C+I+G+(X-M), Where, (X-M) is net export which can be positive or negative.

TABLE 21.1 GDP: The Expenditure Approach

ltem	Symbol	Amount in 2010 (billions of dollars)	Percentage of GDP
Personal consumption expenditures	С	10,285	70.5
Gross private domestic investment	I	1,842	12.6
Government expenditure on goods and services	G	2,991	20.5
Net exports of goods and services	X- M	_539	_3.7
Gross domestic product	<u>Y</u>	14,579	100.0

### 3. The Income Method.

The people of a country who produce *GDP* during a year receive incomes from their work.

Thus *GDP* by income method is the sum of all factor incomes: Wages and Salaries (compensation of employees) + Rent + Interest + Profit.

Item	in 2010 (billions of dollars)	Percentage of GDP
Compensation of employees	7,929	54.4
Net interest	924	6.3
Rental income	299	2.1
Corporate profits	1,210	8.3
Proprietors' income	1,050	7.2
Net domestic income at factor cost	11,412	78.3
Indirect taxes less subsidies	1,127	7.7
Net domestic income at market prices	12,539	86.0
Depreciation	1,860	12.8
GDP (income approach)	14,399	98.8
Statistical discrepancy	180	1.2
GDP (expenditure approach)	14,579	100.0

## **Gross national product (GNP)**

**Gross national product (GNP)** refers to the total value of all the goods and services produced by the residents and businesses of a country, irrespective of the location of production. GNP takes into account the investments made by the businesses and residents of the country, living both inside and outside the country.

**GNP** is the total measure of the flow of goods and services at market value resulting from current production during a year in a country, including net income from abroad.

GNP includes four types of final goods and services:

- Consumers' goods and services to satisfy the immediate wants of the people;
- Gross private domestic investment in capital goods consisting of fixed capital formation, residential construction and inventories of finished and unfinished goods;
- Goods and services produced by the government; and
- Net exports of goods and services,

i.e., the difference between value of exports and imports of goods and services, known as net income from abroad.

## Differences or Comparison between GNP and GDP

Parameters	GNP	GDP
Concept	The gross national product amounts to the valuation of such services and goods produced by a citizen of a country without any constraint on geographical boundaries.	The gross domestic product amounts to the valuation of such services and goods which are produced within the geographical confines of a country.
Purpose	GNP is for measuring all production by the country's nationals	GDP is only for measuring the domestic production within the geographical boundaries of a country.

Focus	The production made by the country's citizens irrespective of the boundary	The production made only on the domestic front of a country
What it seeks to measure	Measurement of the contribution of its citizens towards its economy	Measurement of the strength of the economy of a country
Measuring productivity	Production is measured on an international scale	Production is measured only on a domestic scale
Exclusion	Services and goods which are produced by foreigners residing within the country is excluded from the gross national product	Services and goods which are produced outside the domestic economy of a country is excluded from the gross domestic product
Basis	Citizenship	Location
Focus	Production by citizens of a country	Domestic production
Outlines	Highlights the contribution of residents to the economy.	Highlights the strength of a country's domestic economy.
Formula	GNP =  Consumption Expenditures + Private Domestic Investment + Government Expenditure + Net Exports + (income earned by residents from overseas investments – income earned by foreign residents)	GDP =  Consumption + Investment + Government Spending + Net Export  + T+ T+ N×

### **Nominal GDP versus Real GDP**

#### Nominal GDP

Nominal GDP is the value of final goods and services produced in a given year when valued at the prices of that year. Nominal GDP is just a more precise name for GDP.

<u>Nominal GDP</u> is an assessment of economic production in an economy that includes current prices in its calculation. In other words, it doesn't strip out inflation or the pace of rising prices, which can inflate the growth figure.

All goods and services counted in nominal GDP are valued at the prices that those goods and services are actually sold for in that year. Nominal GDP is evaluated in either the local currency or U.S. dollars at currency market exchange rates to compare countries' GDPs in purely financial terms.

Nominal GDP is used when comparing different quarters of output within the same year. When comparing the GDP of two or more years, real GDP is used. This is because, in effect, the removal of the influence of inflation allows the comparison of the different years to focus solely on volume.

#### Real GDP

Real GDP is the value of final goods and services produced in a given year when valued at the prices of a reference base year. By comparing the value of production in the two years at the same prices, we reveal the change in production.

Real GDP is an inflation-adjusted measure that reflects the number of goods and services produced by an economy in a given year, with prices held constant from year to year to separate out the impact of inflation or deflation from the trend in output over time. Since GDP is based on the monetary value of goods and services, it is subject to inflation.

Rising prices tend to increase a country's GDP, but this does not necessarily reflect any change in the quantity or quality of goods and services produced. Thus, by looking just at an economy's nominal GDP, it can be difficult to tell whether the figure has risen because of a real expansion in production or simply because prices rose.

Economist use a process that adjusts for inflation to arrive at an economy's real GDP. By adjusting the output in any given year for the price levels that prevailed in a reference year, called the base year, economists can adjust for inflation's impact. This way, it is possible to compare a country's GDP from one year to another and see if there is any real growth.

## Differences or Comparison between Nominal GDP and Real GDP

Basis	Nominal GDP	Real GDP
Meaning	Nominal GDP is the monetary value of all goods and services produced within the domestic boundaries of a country based on the price of the goods and services of the same year.	Real GDP is the monetary value of all goods and services produced within the domestic boundaries of a country based on the price of the goods and services of the base year.
What is it?	Nominal GDP is the Gross Domestic Product without any effect of inflation.	Real GDP is the inflationadjusted GDP of a country.
Expressed	The Nominal GDP of a country is expressed in terms of current year prices of goods and services.	The Real GDP of a country is expressed in terms of base year prices or constant prices of goods and services.
Complexity	It is easy to calculate Nominal GDP.	It is quite difficult to calculate Real GDP.

Basis	Nominal GDP	Real GDP
Value of GDP	The value of Nominal GDP is much higher than the value of Real GDP because it takes current market changes into consideration.	The value of Real GDP is much lower than the value of Nominal GDP because it takes the market price of the base year into consideration.
Comparison with the previous GDPs	One can compare the Nominal GDP of different quarters of a country.	One can compare the Real GDP of different financial years of a country.
Economic Growth	One cannot easily analyze the economic growth of a country with its Nominal GDP.	One can easily analyze the economic growth of a country using its Real GDP, as it is a good indicator of economic growth.
Communicated in	Present year prices	Beginning year prices or regular prices
Worth	High	Low
Uses	Compares different quarters of a particular year	Compares two or more financial years