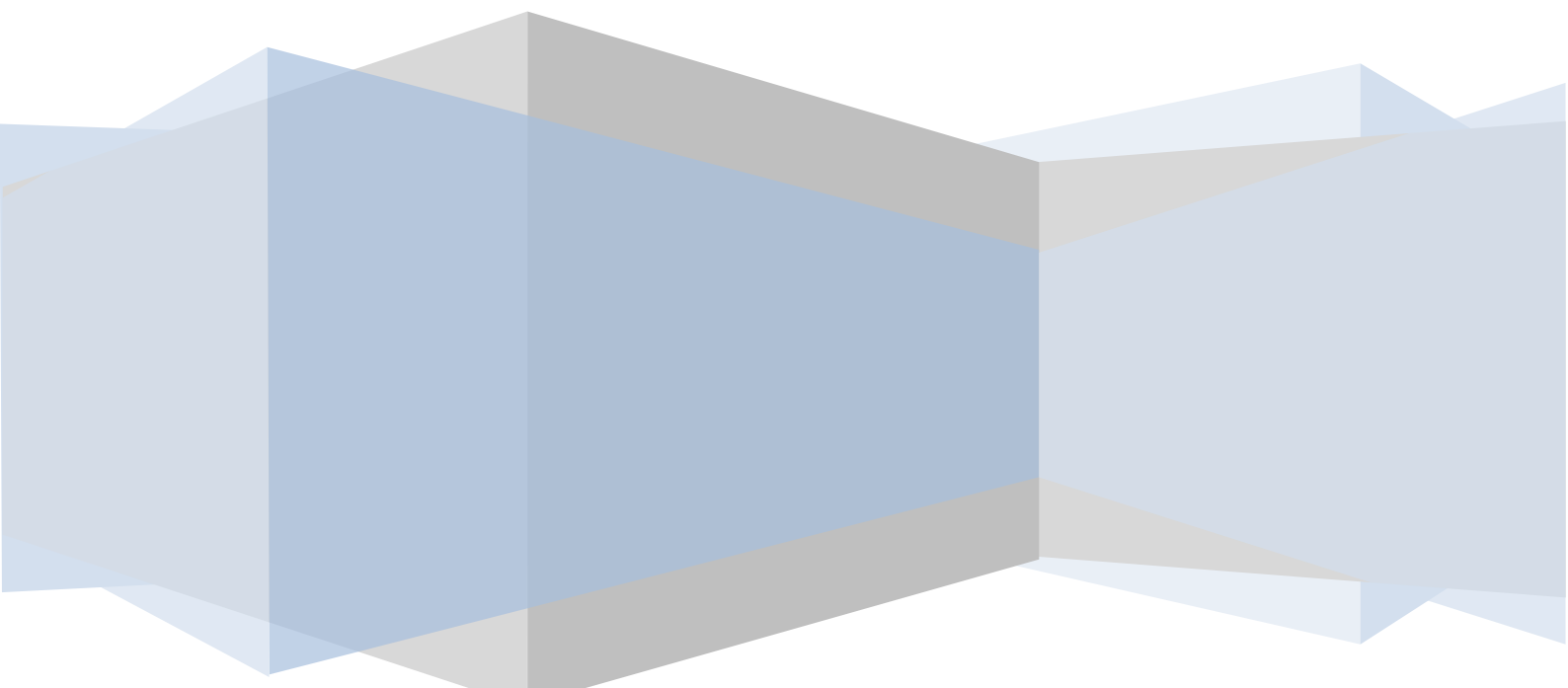


# Chapter 4: Aggregates of National Income – 1

## Short Answers

CSM 05: Economic and Social Development- Sustainable Development, Poverty, Inclusion

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**This chapter contains:**

- **GDP**
- **Factor Cost**
- **Basic Prices**
- **Market Price**
- **Base Year**
- **Gross National Product (GNP)**
- **Net Domestic Product (NDP)**
- **Gross Value Added (GVA)**
- **Basic National Income Aggregates**
- **Gross Domestic Product at Market Prices**

## Contents

1. GDP .....	1
1.1 What is GDP? .....	1
1.2 History of GDP.....	1
1.3 Types of Gross Domestic Product .....	2
1.3.1 Real GDP.....	2
1.3.2 Nominal GDP .....	2
1.3.3 GDP Per Capita .....	2
1.3.4 GDP Purchasing Power Parity (PPP).....	2
1.3.5 Estimating GDP.....	2
1.4 Economic Activity at Factor Cost .....	3
1.5 Expenditure at Market Prices .....	3
1.6 Formula for Calculating GDP .....	4
1.7 Importance of GDP.....	5
1.8 Limitations of GDP .....	5
1.9 GDP Calculation in India Since 2015 .....	5
1.10 Conclusion.....	6
2. Factor Cost .....	7
2.1 What is Factor Cost? .....	7
2.2 Significance of Factor Cost .....	7
2.3 Conclusion.....	8
3. Basic Prices.....	9
3.1 What is the Basic Price? .....	9
3.2 Basic Price - Significance .....	9
3.3 Conclusion.....	9
4. Market Price.....	10
4.1 What is Market Price?.....	10
4.2 Understanding the Market Price .....	10
4.3 Why Market Price is Important? .....	11
4.4 Conclusion.....	11
5. Base Year.....	12
5.1 What is Base Year?.....	12
5.2 How Base Year is fixed and what are the After Effects?.....	12
5.3 Base Year - Importance.....	12

5.4	Conclusion.....	13
6.	Gross National Product (GNP).....	14
6.1	Gross National Product (GNP).....	14
6.2	Importance.....	15
6.3	Drawbacks.....	15
6.4	Conclusion.....	15
7.	Net Domestic Product (NDP) .....	16
7.1	Net Domestic Product (NDP) .....	16
7.2	Importance.....	16
7.3	Conclusion.....	17
8.	Gross Value Added (GVA) .....	18
8.1	Gross Value Added (GVA) .....	18
8.2	Importance.....	19
8.3	Drawbacks.....	19
8.4	Conclusion.....	19
9	Basic National Income Aggregates.....	20
9.1	Basic National Income Aggregates.....	20
9.1.1	Gross Domestic Product (GDP) .....	20
9.1.2	Gross National Product (GNP).....	21
9.1.3	Gross National Product at Market price (GNPMP) .....	21
9.1.4	Net National Product (NNP).....	21
9.1.5	National Income (Net National Income at Factor Cost).....	21
9.1.6	Net Domestic Product at Market Price (NDPMP) .....	21
9.1.7	Net Domestic Product at FC or (NDPFC) .....	22
9.1.8	Gross National Product at FC (GNPFC).....	22
9.2	Other Aggregates .....	22
9.2.1	Personal Income.....	22
9.2.2	Personal Disposable Income .....	22
9.2.3	National Disposable Income .....	22
9.2.4	Private Income .....	23
9.3	Conclusion.....	23
10	Gross Domestic Product at Market Prices (GDP-MP) .....	24
10.1	Gross Domestic Product at Market Prices (GDP-MP) .....	24
10.2	Significance .....	24

10.3 Conclusion..... 25

# 1. GDP

**Gross Domestic Product (GDP)** is the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period. It is calculated on a regular basis to account for changes in the production structure, relative pricing, and better documentation of economic activity. The GDP of India is a topic that is always in the news, hence it is significant for the UPSC Mains. For the IAS Exam, it is critical to learn facts about 'GDP in India,' and this article will offer you all relevant facts.

## 1.1 What is GDP?

- GDP is simply the **sum of the final prices of goods and services** produced in an economy over a specific time period.
- GDP stands for **Gross Domestic Product**, which is a measure of the worth of a country's economic activities.
- All private and public consumption, government outlays, investments, additions to private inventories, paid-in building expenses, and the foreign balance of trade are all factored into a country's GDP calculation.
- The **external balance of trade** is the most essential of all the components that make up a country's GDP.
- When the entire value of products and services sold by local producers to foreign nations surpasses the total value of foreign goods and services purchased by domestic consumers, a country's GDP rises. A country is considered to have a **trade surplus** when this happens.
- A **trade deficit** develops when the amount that domestic consumers spend on foreign items exceeds the entire amount that domestic manufacturers can sell to international customers. The GDP of a country tends to fall under this circumstance.

## 1.2 History of GDP

- **Simon Kuznets**, an economist at the National Bureau of Economic Research, initially proposed the concept of GDP in a report to the United States Congress in response to the Great Depression in 1937.
- **Gross National Product (GNP)** was the most widely used system of measurement at the time. GDP was generally embraced as the primary way of gauging national economies following the Bretton Woods conference in 1944.
- However, beginning in the 1950s, several economists and policymakers began to cast doubt on GDP.
- Some have seen a propensity to regard GDP as an absolute indication of a country's failure or success, despite the fact that it fails to account for health, happiness, equality, and other public welfare constituent aspects.
- To put it another way, these opponents made a contrast between economic and social advancement.

- Most experts, such as **Arthur Okun**, maintained that GDP is an absolute metric of economic performance, saying that for every increase in GDP, there would be a proportional decline in unemployment.

## 1.3 Types of Gross Domestic Product

### 1.3.1 Real GDP

The value of all goods and services generated by an economy in a given year (expressed in base-year prices) is reflected in the real gross domestic product (real GDP), which is also known as **constant-price GDP, inflation-corrected GDP, etc.**

### 1.3.2 Nominal GDP

- Nominal GDP is a measurement of economic output in a country that takes **current prices into account**.
- In other words, it does not account for inflation or the rate at which prices rise, both of which might overstate the growth rate.
- All products and services that are counted in nominal GDP are valued at the prices at which they are actually sold in that year.

### 1.3.3 GDP Per Capita

- The GDP per capita is a measure of the **GDP per person in a country's population**.
- It means that the quantity of output or revenue per person in a given economy may be used to estimate average productivity or living standards.
- Nominal, real (inflation-adjusted), and PPP (purchasing power parity) GDP per capita figures are available.

### 1.3.4 GDP Purchasing Power Parity (PPP)

While purchasing power parity (PPP) is not a direct measure of GDP, economists use it to see how one country's GDP compares to other countries' GDP in "international dollars" using a method that adjusts for differences in local prices and costs of living to make cross-country comparisons of real output, real income, and living standards.

### 1.3.5 Estimating GDP

- India's GDP is computed using two separate methodologies, yielding results that are near in range but not identical.
- The first is based on **economic activity (at factor cost)**, whereas the second is based on **spending (at market prices)**.
- Nominal GDP (calculated using current market prices) and real GDP are calculated further (inflation-adjusted).
- The GDP at factor cost is the most widely observed and reported figure among the four given figures.

## 1.4 Economic Activity at Factor Cost

The factor cost figure is generated by collecting information for each sector's net change in value over a given time period. This cost takes into account the following eight industry sectors:

1. Agriculture, forestry, and fishing.
2. Mining and quarrying.
3. Manufacturing.
4. Electricity, gas, water supply, and other utility services.
5. Construction.
6. Trade, hotels, transport, communication, and broadcasting.
7. Financial, real estate, and professional services.
8. Public administration, defense, and other services.

The following figure shows an example of this method of calculation.

Industry	Gross Domestic Product (Rs. in crores)		Percentage change over previous year
	Previous year	Present year	
	Q2	Q2	Q2
1. agriculture, forestry and fishing	131550	135789	3.2
2. mining and quarrying	25509	24774	-2.9
3. manufacturing	187763	192849	2.7
4. electricity, gas and water supply	22894	25137	9.8
5. construction	91556	95489	4.3
6. trade, hotels, transport and communication	311166	342080	9.9
7. financing, real estate and business services	208644	230627	10.5
8. community, social and personal services	169390	180511	6.6

## 1.5 Expenditure at Market Prices

- The expenditure (at market prices) technique entails adding up domestic spending on final products and services across multiple streams during a given time period.
- It takes into account household consumption spending, net investments (i.e. capital formation), government costs, and net trade (exports minus imports).

Item	Rs. in Crores Expenditure of GDP		Rate of GDP at Market Prices (%)	
	Previous Year	Present Year	Previous	Present
	Q2	Q2	Q2	Q2
1. Private Final Consumption Expenditure (PFCE)	741,624	785,463	59.9	59.5
2. Government Final Consumption Expenditure (GFCE)	135,400	140,883	10.9	10.7
3. Gross Fixed Capital Formation (GFCF)	405,567	402,994	32.8	30.5
4. Change in Stocks	44,808	45,499	3.6	3.4
5. Valuables	29,984	37,681	2.4	2.9
6. Exports	262,098	333,947	21.2	25.3
7. <u>Less</u> Imports	356,753	395,512	28.8	29.9
8. Discrepancies	-25,117	-29,918	-2.0	-2.3
<b>GDP at market prices</b>	<b>1,237,610</b>	<b>1,321,038</b>	<b>100</b>	<b>100</b>

- Although the GDP figures from the two approaches do not quite match, they are near.
- The spending method provides useful information on which segments of the Indian economy contribute the most.
- For example, domestic household spending, which accounts for 59.05 percent of the economy, is one of the reasons why India is relatively unaffected by global economic slowdowns.
- Any economy that is heavily dependent on exports will be more vulnerable to global recessions.

## 1.6 Formula for Calculating GDP

$$\text{GDP} = \text{C} + \text{I} + \text{G} + \text{IX}$$

Where C = Consumption

I = Investment

G = Government Expenditure

IX = Export - Import



## 1.7 Importance of GDP

- GDP is often recognized as the most essential of the metrics used by economists throughout the globe to determine an economy's growth.
- It considers the country's overall output over the course of a year. It is a crucial criterion for assessing an economy's performance and a vital determinant in influencing the economy's development.

## 1.8 Limitations of GDP

- Non-market transactions are not included in GDP.
- It is unable to determine if a country's growth is sustainable.
- It ignores the influence on human health and the environment that may develop as a result of the output's creation or use as externalities.

## 1.9 GDP Calculation in India Since 2015

- The government switched to a **new base year of 2011-12** for national accounts in January 2015, replacing the previous base year of 2004-05.
- To better quantify economic activity, the Central Statistics Office (CSO) **discontinued GDP at factor cost** and embraced the worldwide practice of **GDP at market price and the Gross Value Addition (GVA) measure**.
  - **GDP at market price = GDP at factor cost + Indirect Taxes – Subsidies**
- With the switch to the new base year, the economy's growth rate was predicted to be **6.9% in 2013-14, up from 4.7 percent in 2004-05**. Similarly, the 2012-13 growth rate was increased to 5.1 percent from 4.5 percent.
- The most recent series' base year was changed from 2004-05 to 2011-12, and for the organised private sector, a new data series, MCA-21, was used.
- It contained information on all companies registered with the Ministry of Corporate Affairs, and each was given a unique **21-digit code, MCA-21**, to identify them.
- The new database is also much more comprehensive, covering financial institutions as well as regulatory bodies like **SEBI, PFRDA, and IRDA**.
- A number of local organisations and institutions are featured in this series.
- In the previous system, IIP was used to track manufacturing and trading activity. Changes in volume were accounted for, but not in value. In the newer methodology, we use the concept of GVA – Gross Value Added – to measure the value added to the economy.
- GDP was previously estimated using **IIP data, which was then updated using ASI data (Annual Survey of Industries)**. Only those businesses that were registered under the **Factories Act were included in ASI**.
- The newer system uses data from **MCA 21 (MCA 21 is a Ministry of Corporate Affairs e-governance initiative that was launched in 2006 and allows firms/companies to electronically file their financial results)**.
- Previously, farm produce was used to calculate agricultural income as a proxy. The scope of calculating value addition in agriculture has been expanded thanks to the new methodology.

- When **evaluating financial activity under the previous system**, only a few mutual funds and NBFCs were taken into account.
- Stockbrokers, asset management funds, pension funds, stock exchanges, and other entities are now included in the new methodology's coverage.
- The old system used data from the **NSSO's 1999 establishment survey** for trading income, while the new series uses data from the 2011-12 survey.

## **1.10 Conclusion**

GDP allows policymakers and central banks to determine whether the economy is declining or increasing, whether it needs stimulus or restraint, and whether a threat such as a recession or inflation is imminent. GDP, like any other metric, has flaws. In the last several decades, governments have experimented with a variety of nuanced changes in an attempt to improve GDP precision and specificity. Since its inception, the methods for calculating GDP have developed to keep up with changing measures of economic activity and the production and consumption of new, developing kinds of intangible assets.

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## 2. Factor Cost

**Factor costs** include all the costs of the factors of production to produce a given product in an economy. In India, the most highlighted measure of national income has been the GDP at factor cost. **The Central Statistics Office (CSO)(now National Statistical Office-NSO)** of the Government of India has been reporting the GDP at factor cost and at market prices. In its revision, in January 2015 the CSO replaced GDP at factor cost with the GVA at basic prices, and the GDP at market prices, which is now called only GDP, is now the most highlighted measure. Here we will discuss the Factor Cost in detail, which will be useful for UPSC Civil Service Exam preparation.

### 2.1 What is Factor Cost?

- The manufacturing process needs a lot of inputs. Land, labor, capital, and entrepreneurship are examples of these inputs, which are referred to as **factors of production**.
- The use of these elements of production comes at a cost to producers of goods and services.
- The **cost of factors of production borne by a company** when manufacturing goods and services is referred to as factor cost.
  - Renting machines, acquiring machinery and land, paying employees and wages, getting money are all examples of such production costs.
- **Taxes paid to the government are not included** in the factor cost since they are not directly engaged in the production process and so is not a component of the direct production cost.

### 2.2 Significance of Factor Cost

Factor cost has the following uses in economics:

- Factor cost or national income by type of income is a measure of national income or output based on the cost of factors of production, instead of market prices. It allows the effect of any subsidy or indirect tax to be removed from the final measure.
- It can also refer to the unit cost of a particular factor of production, such as the wage rate or the rental rate of capital.
- **Factor Cost or Factor Income** are the incomes received by the owners of the production for rendering their factor services to the producers.
- Corresponding to the real flow of factor services from the households to the producers, there is a money flow from the producers to the households in the form of rent, interest, profit, and wages which results in the production of goods and services in the economy.

## 2.3 Conclusion

Factor Cost is a benchmark for the different types of calculation in the economy. It helps to understand the cost of production, what changes are required, etc in an economy. Thus, it forms the basis of all growth-related calculations in any economy.

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### 3. Basic Prices

The **basic price** is the amount a producer **receives from a purchaser for a unit** of a thing or service provided as an output, less any tax owed and any subsidy owed to the producer as a result of its production or sale. Here we will discuss in detail the Basic Prices, which will be helpful for UPSC Civil Service preparation.

#### 3.1 What is the Basic Price?

- The basic price is the amount the producer receives from the purchaser for a unit of a good or service produced as output, minus any tax due (such as sales tax or VAT paid by the buyer) and any subsidy due on that unit as a result of its production or sale.
- It does not include any transportation charges invoiced separately by the producer.
- In other words, the basic price is the amount collected by the seller rather than the amount paid by the customer.

Basic price = Factor cost + Production taxes – Production subsidy

- The term Basic price is the alternate term to describe a **Producer's price**.
- It is different from market prices or buyer's prices.
- **Production taxes or production subsidies** are paid or received with relation to production and are independent of the volume of actual production.
- Some examples of production taxes are land revenues, stamps and registration fees, and tax on the profession.
- GVA at basic prices will include production taxes and exclude production subsidies available on the commodity.

#### 3.2 Basic Price - Significance

- It is one of the factors which determine the demand for a product.
- It excludes product taxes and subsidies.

#### 3.3 Conclusion

Basic Price is a benchmark for the different types of calculation in the economy. It helps to understand the cost of production and other inherited costs, determines the demand in the market, etc in an economy. Thus, it forms the basis of all growth-related calculations in any firm.

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## 4. Market Price

The **market price** is the **current price** at which an asset or service can be bought or sold. It is an important term in the concept of Production and Supply in Economics. Here we will discuss the various dimensions of Market Price, which will be helpful for UPSC Civil Service preparation.

### 4.1 What is Market Price?

- After goods and services are manufactured, they are sold at market prices.
- The market price is the price at which customers will pay for a product when they **buy it from a retailer**.
- To arrive at the market price, government taxes will be added to the factor cost, while **subsidies will be subtracted from the factor cost**.
- **Subsidies** are decreased because subsidies recompense the factor cost or lower the market price and the factor cost.
- Taxes are increased because they are costs that raise the price, and subsidies are reduced because they compensate for the factor cost or reduce the market price and the factor cost.

Market price = Basic price + Product taxes – Product subsidy

Or

Market Price = Factor cost + Net indirect taxes

(Net indirect taxes = Indirect taxes – Subsidy)

- Per unit of product, **product taxes or subsidies** are paid or received.
- **Excise tax, sales tax, service tax, and import and export charges** are all examples of product taxes.
- Food, petroleum, and fertilizer subsidies are examples of product subsidies.

### 4.2 Understanding the Market Price

- A shift in the market price for an item or service can be caused by shocks to the supply or demand for that good or service.
  - A **supply shock** occurs when an unforeseen occurrence occurs that causes the supply of an item or service to abruptly shift.
    - Interest rate reduction, tax cuts, government stimulus, terrorist attacks, natural catastrophes, and stock market collapses are all instances of a supply shock.
  - A **demand shock** occurs when the demand for an item or service suddenly surges or declines.

- A sharp increase in the price of oil or other commodities, political unrest, natural calamities, and technological advancements are all instances of a demand shock.

### 4.3 Why Market Price is Important?

- One of the key reasons market price is significant is that it gives a **precise way for establishing what an item is worth** that eliminates ambiguity or confusion.
- Customers and sellers in the marketplace frequently hold opposing views about a product's worth.
- The fundamental purpose of assessing market price is to arrive at an **accurate appraisal of the asset's worth or value**.
- It is, simply said, the price at which the item would typically be sold. Buyers can choose to pay, while sellers can take more or less than market value.

### 4.4 Conclusion

The amount of money for which an asset may be sold in a market is referred to as market price. The market price of a particular commodity is the point at which demand and supply for that good converge. It's a crucial part in calculating consumer surpluses, economic surpluses, and other types of surpluses. Due to variations or shocks in demand and supply variables, the market price of an item or service is vulnerable to revaluation.

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## 5. Base Year

When calculating a business operation or economic index, a **base year** is used for comparison. Thus, the **base year acts as a benchmark** in the growth of a firm or an economy. Here we will discuss in detail about the base year which will be helpful for UPSC Civil Service preparation.

### 5.1 What is Base Year?

- The base year of National Accounts is set to allow for **inter-year comparisons**.
- It enables the computation of inflation-adjusted growth estimates and offers a sense of changes in buying power.
- The base year for the most recent National Accounts series was altered from **2004-05 to 2011-12**.
- The base year serves as a baseline against which national account metrics such as GDP, gross domestic savings, and gross capital creation are measured.

### 5.2 How Base Year is fixed and what are the After Effects?

- The **Central Statistical Organisation (CSO) (now NSO)** of India issued the first estimates of national income in 1956, using 1948-49 as the base year.
- The technique was altered as the availability of data improved over time.
- Previously, CSO relied on population estimates from the National Census to determine the economy's workforce.
- As a result, the base year was always the same as the census year, such as 1970-71, 1980-81, and so on.
- As a result, the CSO determined that the **National Sample Survey (NSS)** data on workforce size were more accurate and that the base year would be changed every five years when the NSS performed such a survey.
- From 1999, when the base year was changed from 1980-81 to 1993-94, this approach was implemented.
- The government switched to a new base year of 2011-12 for national accounts in January 2015, replacing the previous base year of 2004-05.
- With the switch to the new base year, the economy's growth rate was predicted to be 6.9% in 2013-14, up from 4.7 percent in 2004-05. Similarly, the 2012-13 growth rates was increased to 5.1 percent from 4.5 percent.

### 5.3 Importance

- The base year prices are also known as **constant prices** since they reduce all of the data to a similar baseline, the base year price.
- The base year is a representative year that is **free of unusual events** such as droughts, floods, earthquakes, and so on.
- It is a year that's very close to the one for which the national accounts statistics are being compiled.



- The base year must be updated regularly to reflect structural changes in an economy, such as a rising percentage of services in GDP.
- The data will be more accurate if the base year can be updated more regularly.

## **5.4 Conclusion**

Base year holds a key position in the National Accounting Standards. It offers a comparative approach between the current and past state of the economy. Proper revision of the base year is important for a healthy economy to understand the changes in the system.

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## 6. Gross National Product (GNP)

**Gross National Product (GNP)** is an indicator of a **country's national income**. The total value of all commodities and services generated by a country's citizens and enterprises, regardless of where they are produced, is referred to as the **gross national product (GNP)**. This article will explain to you the concepts related to the **Gross National Product (GNP)** which will be helpful in Indian Economy preparation for the IAS exam.

### 6.1 Gross National Product (GNP)

- The total value of all goods and services generated by citizens and enterprises in a country, regardless of where they are produced, is referred to as the **gross national product (GNP)**.
- The **Gross National Product (GNP)** accounts for investments made by enterprises and citizens of the country, both inside and outside the country. It also takes into account the value of products generated by **domestically based industries**.
- GNP does not include revenue made by **foreign nationals** in the country or any products manufactured by a foreign business in the country's manufacturing units.
- Only the final commodities and services are taken into account when **calculating GNP**. Double counting is prevented by avoiding intermediate products.
- The following elements are taken into account when calculating a country's GNP:
  - Consumption expenditure
  - Investment
  - Government expenditure
  - Net exports (Total exports minus total imports)
  - Net income (Income earned by residents in foreign countries minus income earned by foreigners in the country)
- The following is the mathematical formula for calculating GNP:
  - **GNP = Consumption expenditure + Investment + Government expenditure + Net exports + Net income**
- Manufacturing of items such as equipment, machinery, agricultural products, and cars, as well as some services such as consulting, education, and health care, are all included in GNP.
- The cost of providing the services is not individually calculated because it is included in the final product price.
- The **calculation of GNP** per capita is used for country-to-country comparisons, however, it becomes complicated when a citizen possesses dual citizenship. In this situation, their earnings are accounted for as GNP in each of the separate countries, resulting in double counting.

#### Example;

- Consider a country where the gross national product is higher than the gross domestic product.

- This means that the country's citizens, firms, and corporations are bringing in net inflows through their international operations.
- As a result, a **higher GNP** could indicate that a country is expanding its foreign financial operations, trade, or production.

## 6.2 Importance

- Economists consider GNP to be an **essential economic indicator**. They use it to come up with answers to economic problems like **poverty and inflation**.
- When income is determined per person, regardless of location, GNP becomes a far more trustworthy indicator than GDP.
- The BoP is analysed using the information acquired from GNP (Balance of Payments). Economists utilize GNI, or gross national income, in some countries or unions, such as the **European Union**.
- The entire worth of products and services generated by the inhabitants of a country in a given year is known as the Gross National Product (GNP).
- It isn't limited to a certain region. When we look at India's GNP, we can see that it is lower than GDP. The value of foreign currency changes.

## 6.3 Drawbacks

- The value of a foreign currency change. As a result, it has an impact on the calculation.
- It is useless in judging whether an economy is expanding or contracting.

## 6.4 Conclusion

The **gross national product (GNP)** is an estimate of the total worth of all final products and services produced by the means of production held by a country's people in a particular period. Personal consumption expenditures, private domestic investment, government expenditure, net exports, and any income made by locals from overseas investments, minus income earned within the domestic economy by foreign residents, are all used to compute GNP. Net exports are the difference between what a country exports and any products and services it imports.

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## 7. Net Domestic Product (NDP)

**Net domestic product (NDP)** is a yearly measure of a country's economic output. The net worth of all goods and services generated **inside a country's geographic borders** is referred to as the net domestic product. It is regarded as a significant measure of a country's economic growth. Which is determined by **deducting depreciation from gross domestic product (GDP)**. This article will explain to you the concepts related to the Net Domestic Product (NDP) which will be helpful in Indian Economy preparation for the IAS exam.

### 7.1 Net Domestic Product (NDP)

- The **net worth** of all **goods and services** generated inside a country's geographic borders is referred to as the net domestic product. It is regarded as a **significant measure** of a country's economic growth.
- The value of depreciation of national capital assets such as machinery, houses, and cars is subtracted from the **gross domestic product (GDP)** to arrive at the **net domestic product (NDP)**.
- Other considerations such as asset obsolescence and complete destruction are also taken into account by the NDP. Capital consumption allowance is another term for depreciation.
- If a country's capital stocks are not replaced as a result of **depreciation**, the country's GDP falls.
- It is considered favourable for an economy if the gap between **GDP and NDP** narrows or closes. It also denotes a state of **economic equilibrium**. A bigger disparity between **GDP and NDP**, on the other hand, indicates an increase in the value of obsolescence.
- Such a rise, along with a decline in the value of the capital stock, suggests economic stagnation.
- NDP can be calculated using the following formula.
  - **NDP = GDP – Depreciation**
- Depreciation is the term used to describe the **depreciation of capital assets such as equipment, vehicles, and houses**.
- **The NDP** is thought to be preferable to the **GDP** as a measure of a country's well-being because it accounts for depreciation of capital assets.
- This notion is about NDP, or net domestic product, which is a key metric for measuring a country's economic health.
- A **rising NDP indicates a growing economy**, whereas a falling NDP indicates stagnation.

### 7.2 Importance

- **Net domestic product** is sometimes regarded as a more accurate economic statistic than GDP since it includes the amount of money spent on upgrading outmoded equipment in order to maintain the same level of output.

- Although an increase in depreciation can raise GDP, it does not imply that the country's social and economic well-being has improved.
- As a result, by **examining net investment**, NDP may provide a better picture of a country's economic health.
- The economy expands when the **net investment is positive**. When net investment is negative, it is unable to offset depreciation and maintain current output levels, indicating that the economy is in decline.
- When comparing a country's **GDP and NDP**, a growing disparity between the two shows increased obsolescence and value deterioration of the country's capital stock. It could indicate a period of economic stagnation.
- A narrowing gap between **GDP and NDP** indicates that the country's capital stock is in better shape. The country appears to be reinvesting in its economy and upgrading its capital.

### 7.3 Conclusion

NDP, along with GDP, GNI, disposable income, and personal income, is one of the primary indicators of economic growth released by the Bureau of Economic Analysis on a quarterly basis (BEA). Though GDP is usually used to gauge a country's economic health, NDP considers the rate at which capital assets degrade and need to be replaced. This is critical since failure to respond would result in a reduction in the country's GDP.

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## 8. Gross Value Added (GVA)

**Gross value added (GVA)** measures the entire value of goods and services produced in a given economy. The amount of value added to a product is considered. GVA is significant since it is used to **calculate GDP**, a vital indication of a country's overall economic health. It can also be used to determine the amount of value added (or lost) by a certain region, state, or province. This article will explain to you the concepts related to the **Gross Value Added (GVA)** which will be helpful in Indian Economy preparation for the IAS exam.

### 8.1 Gross Value Added (GVA)

- The contribution of a **corporate subsidiary**, company, or municipality to an economy, producer, sector, or region is measured by **gross value added (GVA)**, an economic productivity statistic.
- The difference between gross and net output is the GVA, which is the country's **output minus intermediate consumption**.
- GVA is significant because it is used to **adjust GDP**, which is a major indicator of a country's overall economic health.
- It can also be used to calculate how much a **product or service** has helped a firm meet its fixed costs.
- It is the **principal entry** on the revenue side of the nation's accounting balance sheet, and it reflects the supply side from an economic standpoint.
- GVA is the sum of a country's GDP and net of subsidies and taxes in the economy at the macro level, according to national accounting standards.

**Gross Value Added = GDP + subsidies on products - taxes on products**

- Previously, India measured GVA at '**factor cost**' until a new approach was implemented, with GVA at 'base prices' becoming the key indicator of economic output.
- Production taxes will be included in GVA at basic prices, while production subsidies will be excluded.
- GVA at factor cost did not include any **taxes or subsidies**.
- In addition, the base year has been changed from 2004-05 to 2011-12.
- The **National statistical office (NSO)** publishes estimates of GVA output on a quarterly and annual basis. It contains data on eight main types of commodities produced and services offered in the economy, as well as sectoral classification data.
- Agriculture, Forestry, and Fishing.
- Mining and Quarrying.
- Manufacturing.
- Electricity, Gas, Water Supply, and other Utility Services.
- Construction.
- Trade, Hotels, Transport, Communication, and Services related to Broadcasting.
- Financial, Real Estate, and Professional Services.
- Public Administration, Defence and other Services.

## 8.2 Importance

- **GVA** depicts the state of **economic activity** from the perspective of producers or supply, **GDP** depicts the state of economic activity from the perspective of consumers or demand.
- **GVA** is seen to be a more **accurate indicator of the economy**. Because a sudden increase in output can be attributed to higher tax collections, which could be due to better compliance or coverage, rather than the **genuine output situation**, **GDP fails** to measure the **true economic reality**.
- The **GVA** measure provides a sector-by-sector analysis, which helps policymakers determine which sectors require incentives or stimulation and create sector-specific policies accordingly.
- However, when it comes to cross-country comparisons and comparing the earnings of different countries, **GDP is a critical metric**.
- **GVA** is an **important and necessary** metric in measuring a country's economic success from the standpoint of global data standards and homogeneity.
- Any government that wants to attract foreign money and investment must follow international best practices in national income accounting.

## 8.3 Drawbacks

- The **sourcing of data and the accuracy** of the numerous data sources are critical to **GVA** accuracy.
- **GVA**, like any other metric, is vulnerable to flaws caused by the use of **ineffective or incorrect procedures**.

## 8.4 Conclusion

**GVA** is significant since it is factored into **GDP**, a vital indication of a country's overall economic health. It can also be used to determine how much value is added (or taken away) by a specific region, state, or province.

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## 9 Basic National Income Aggregates

The **Basic National Income Aggregates** refers to a set of rules and methodologies for calculating a country's production. National income is calculated using a variety of macroeconomic identities such as **GDP, GVA, and NNP**. **GDP** is divided into four primary expenditure categories by the national income accounts: consumption, investment, government purchases, and net exports. This article will explain to you the concepts related to the **Basic National Income Aggregates** which will be helpful in Indian Economy preparation for the IAS exam.

### 9.1 Basic National Income Aggregates

- Within an accounting year, **national income** is defined as the net money worth of all final goods and services produced by residents **residing within and outside the country's borders**.
- GDP is divided into four primary expenditure categories by the national income accounts: consumption, investment, government purchases, and net exports.
- The aggregates related to national income are
- Gross Domestic Product (GDP) ( market price and factor cost )
- Gross National Product (GNP)
- Gross National Product at the Market price (GNPMP)
- Net National Product (NNP)
- National Income (Net National Income at Factor Cost)
- Net Domestic Product at Market Price (NDPMP)
- Net Domestic Product at FC or (NDPFC)
- Gross National Product at FC (GNPFC)

#### 9.1.1 Gross Domestic Product (GDP)

- The market worth of all final **goods and services** produced inside a country for a certain time period is referred to as GDP.
- The term "**domestic**" in **Gross Domestic Product** refers to the fact that the GDP only includes goods and services generated **within a country**.
- In the calculation of GDP, only '**final**' **products and services** are considered.
- The term "**final products and services**" refers to commodities and services that are intended for final consumption (for final user). It differs from intermediate goods and services, which serve as a component in the production of final goods and services.
- The number of goods and services produced over a given time period (typically a year) is counted. GDP is calculated regularly and annually in India.
- **GDPMP** stands for **Gross Domestic Product at Market Prices**, which is the gross market value of all final products and services produced within a country's domestic territory within a given accounting year.
- **GDPMP** = Net domestic product at FC (NDPFC) + Depreciation + Net Indirect tax.



- **Gross domestic product at factor cost**, or GDPFC, is the entire money worth of products and services generated within a nation's domestic territory within a single accounting year, excluding net indirect taxes.
- **GDPFC = GDPMP – Net Indirect tax.**

### 9.1.2 Gross National Product (GNP)

- **GNP** is another indicator of a country's national income.
- In the case of GDP, the market value of all final goods and services produced within the country is calculated.
- However, it is possible that Indian citizens work and earn money in other nations. On the other hand, some productivity within a country may be attributable to temporary and seasonal foreign labour.
- **GNP = GDP + 'Net' factor income from abroad**
- **Net Factor income from abroad** = income earned by the domestic factors of production employed in the rest of the world – Factor income earned by the factors of production of the rest of the world employed in the domestic economy.

### 9.1.3 Gross National Product at Market price (GNPMP)

- It is the total of factor incomes earned by ordinary citizens of a country over the course of a fiscal year, including depreciation and net indirect taxes.
- **GNPMP = NNPFCC + Dep + Net indirect tax**

### 9.1.4 Net National Product (NNP)

- **Production factors** are subjected to wear and tear. Depreciation is the term for this wear and tear. This wear and tear consumes a portion of capital that is not utilised in the creation of products and services.
- When we subtract depreciation from GNP, we get NNP.
- **Net National Product (Market Price)** = Gross National Product – Depreciation
- **NNP (Factor Cost)** = NNP (Market Price) – Taxes + Subsidies.

### 9.1.5 National Income (Net National Income at Factor Cost)

- National Income is the Net National Product at Factor Cost.
- **NNP (Factor Cost) = National Income = NNP (Market Price) – Taxes + Subsidies.**

### 9.1.6 Net Domestic Product at Market Price (NDPMP)

- It is the monetary worth of all final goods and services produced within a country's domestic territory within a given accounting year, excluding depreciation.
- **NDPMP = GDPMP – Depreciation**

### 9.1.7 Net Domestic Product at FC or (NDPFC)

- It's the total worth of all final goods and services, excluding depreciation and net indirect tax.
- As a result, it equals the sum of all factor incomes (employee compensation, rent, interest, profit, and mixed income of self-employed) created in the country's domestic territory.
- $NDPFC = GDP \text{ at MP} - \text{Depreciation} - \text{Indirect tax} + \text{Subsidy}$

### 9.1.8 Gross National Product at FC (GNPFC)

- During an accounting year, it is the sum total of factor incomes earned by ordinary people of a country, plus depreciation.
- $GNPFC = NDPFC + \text{Depreciation}$ .

## 9.2 Other Aggregates

### 9.2.1 Personal Income

- Households receive a portion of national income known as personal income.
- **Personal income (PI)**  $\equiv NI - \text{Undistributed profits} - \text{Net interest payments made by households} - \text{Corporate tax} + \text{Transfer payments to the households from the government and firms}$ .
- **Undistributed profits** - these are profits that are not distributed to families
- **Corporate tax** - this is another tax that does not accrue to individuals.

### 9.2.2 Personal Disposable Income

- **Personal Disposable Income (PDI)** is the amount of money available to households to spend as they see fit.
- Individuals do not have access to all of their Personal Income. They must pay both taxes (e.g., income tax) and non-tax payments (e.g., fines).
- **Personal Disposable Income (PDI)**  $= PI - \text{Personal tax payments} - \text{Non-tax payments (such as fines etc)}$ .
- As a result, Personal Disposable Income is the portion of total income that belongs to households. They might decide to eat a portion of it and keep the remainder.

### 9.2.3 National Disposable Income

- The term "National Disposable Income" refers to the maximum value of goods and services available to the domestic economy.
- **National Disposable Income**  $= \text{Net National Product at market prices} + \text{Other current transfers from the rest of the world}$ .
- Gifts, help, and other items are among the current transfers from the rest of the world.

#### 9.2.4 Private Income

- Any type of money obtained by a private individual or family, generally generated from occupational activities, or revenue received by an individual that is not in the form of a salary, wage, or commission is referred to as "private income."
- **Private Income** = Factor income from net domestic product accruing to the private sector + National debt interest + Net factor income from abroad + Current transfers from government + Other net transfers from the rest of the world.

#### 9.3 Conclusion

The total worth of goods and services generated by a country during its fiscal year is referred to as its national income. It is thus the result of all economic activity that takes place in a country over the course of a year. It is valued in monetary terms. In a nutshell, a country's national income is the entire amount of money it earns over the course of a year through various economic activities. It is also useful in determining the country's progress.

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## 10 Gross Domestic Product at Market Prices (GDP-MP)

The **Gross Domestic Product at Market Prices (GDP-MP)** measures the wealth created by all private and governmental agents in a given country over a specified time period. It is the most important national account aggregate; it represents the maximum outcome of resident producing units' productive activity. This article will explain to you the concepts related to the **Gross Domestic Product at Market Prices (GDP-MP)** which will be helpful in Indian Economy preparation for the IAS exam.

### 10.1 Gross Domestic Product at Market Prices (GDP-MP)

- The **Gross Domestic Product (GDP)** measures the economic output generated by consumers. It includes private consumption, gross investment in the economy, government investment, government spending, and net international trade (the difference between exports and imports).
- To better assess economic activity, the Central Statistics Office (CSO) (now renamed as National Statistical Office) abandoned GDP at factor cost in 2015 and embraced the international practice of GDP at market price and the Gross Value Addition (GVA) metric.
  - **GDP at market price = GDP at factor cost + Indirect Taxes – Subsidies**
- At market prices, there are three ways to calculate GDP:
- **The production approach**, defined as the sum of all activities that produce goods and services, plus taxes and minus product subsidies.
- **The expenditure approach**, which is defined as the sum of all final expenditures made in either consuming or adding to wealth, plus exports and minus imports of goods and services.
- **The income approach**, which considers all earnings earned during the production of products and services (paying salaries, gross operating margin, and mixed-income), plus production and import taxes, and minus subsidies.
- The Ministry of Finance uses GDP numbers (at current prices) to set fiscal targets under the Fiscal Responsibility and Budget Management Act 2003 and Rules thereunder.
- **The relation between GVA and GDP:**  $GVA \text{ at basic prices} + (\text{product taxes}) - (\text{product subsidies})$  gives GDP at market price.

### 10.2 Significance

- Domestic GDP was previously computed using the factor cost method, which took into account the prices of goods received by producers. Consumers' market pricing is factored into the new calculation.
- More thorough data on company activity has been incorporated into the new GDP, and it now encompasses more factories. Not only are production costs now taken into account, but also selling and marketing expenditures.
- Previously, the government's receipts were not included in India's headline GDP. After removing subsidies, what it gets from indirect taxes (such as sales tax and

excise duty) is now included in headline GDP. GDP at a constant market price, for example.

- The disadvantage of this strategy is that the GDP figure can be altered by changing the distribution of subsidies or raising taxes.

### **10.3 Conclusion**

Market price clearly incorporates both product and production taxes while excluding both product and production subsidies. GDP at Market Prices is calculated by subtracting the value of intermediate consumption from the total value of output produced by all producers within a country's domestic territory. In other words, it is calculated as the entire gross value added multiplied by the market price.

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