Topic covered In this One Shot

● Measuring the value of economic activity and its importance;

● Meaning of GDP and GNP;

● Stocks and flows;

● Circular flow in an economy

● Approaches to measuring GDP Income method, expenditure method, and value added method;

● GDP deflator; Real GDP vs Nominal GDP;

● GDP the underground economy; GDP and Social welfare;

MEASURING THE VALUE OF ECONOMIC ACTIVITY

Measuring the value of economic activity typically involves calculating the Gross Domestic Product (GDP), it refers to gross money value of all the final goods and services produced within domestic territory of a country during a period of one year. Here's how it works:

1. Total Output: GDP sums up the market value of all final goods and services produced, avoiding double-counting by only considering final products and not the intermediate goods used to produce them.

2. Price Valuation: The market value is determined by the price consumers are willing to pay for these goods and services, reflecting both quantity and price.

3. Time Frame: GDP is usually measured on a quarterly or annual basis, providing a picture of economic activity over that period.

4. Nominal vs. Real GDP: Nominal GDP measures the value of output using current prices, while real GDP adjusts for inflation, using constant prices from a base year to provide a more accurate reflection of economic growth.

5. Components of GDP: It includes consumption (C), investment (I), government spending (G), and net exports (NX), which is exports minus imports. The formula is represented as GDP = C + I + G + (X - M).

6. Economic Health Indicator: GDP is often considered as an index of welfare of the people. Welfare means sense of material well-being among the people. It depends on greater per head availability of goods and services. So, higher GDP is generally taken as greater welfare of people.

MEASURING THE VALUE OF ECONOMIC ACTIVITY IMPORTANCE

1. It helps in the study of economic growth of an economy.

2. To understand to unequal distribution of wealth in an economy.

3. To analyse the problem of inflation and deflation.

4. To compare domestic country with the developed countries of the world.

5. To estimate the purchasing power of the economy.

6. Helps public sector to frame suitable policies for development.

7. It acts as a guide to economic planning.

BASIC AGGREGATES OF NATIONAL INCOME

There are eight (8) aggregates in National Income to measure the value of goods and services in terms of money. These are as follows:

1. Gross Domestic Product at Market Price (GDP_{MP})

GDP_{MP} refers to the gross market value of all the final goods and services produced during a period of one year within the domestic territory of a country.It is shown as:

GDPMP = Net domestic product at FC (NDPFC) + Depreciation + Net Indirect tax

Gross in GDPMP means that the total value of final goods and services includes depreciation, i.e., no provision has been made for it.

Domestic in GDPMP means that the final goods and services produced are located within the domestic boundaries/territory of the country.

Product in GDPMP indicates that only final goods and services are included.

Market Price in GDPMP means that the amount of indirect taxes paid is included in GDP and the subsidies are excluded from it.

2. Gross Domestic Product at Factor Cost (GDPFC)

GDPFC refers to the gross money value of all the final goods and services produced during a period of one year within the domestic territory of a country. It can be determined as:

GDPFC = GDPMP – Net Indirect Taxes

3. Net Domestic Product at Market Price (NDPMP)

NDPMP refers to the net market value of all the final goods and services produced during a period of one year within the domestic territory of a country. It can be determined as:

NDPMP = GDPMP – Depreciation

4. Net Domestic Product at Factor Cost (NDPFC)

NDPFC refers to the net money value of all the final goods and services produced during a period of one year within the domestic territory of a country. It can be determined as:

NDPFC = GDPMP – Net Indirect Taxes – Depreciation

NDPFC is also known as Domestic Factor Income or Domestic Income.

5. Gross National Product at Market Price (GNPMP)

GNPMP refers to the gross market value of all the final goods and services produced during a period of one year by the normal residents of a country. It can be determined as:

GNPMP = GDPMP + Net Factor Income from Abroad

GNPMP of a country can be less than its GDPMP if NFIA is negative. However, it can be more than GDPMP if NFIA is positive.

6. Gross National Product at Factor Cost (GNPFC)

GNPFC refers to the gross money value of all the final goods and services produced during a period of one year by the normal residents of a country. It can be determined as:

GNPFC = GNPMP – Net Indirect Taxes

7. Net National Product at Market Price (NNPMP)

NNPMP refers to the net market value of all the final goods and services produced during a period of one year by the normal residents of a country. It can be determined as:

NNPMP = GNPMP – Depreciation

8. Net National Product at Factor Cost (NNPFC)

NNPFC refers to the net money value of all the final goods and services produced during a period of one year by the normal residents of a country. It can be determined as:

NNPFC = GNPMP – Net Indirect Taxes – Depreciation

NNPFCis also known as National Income.

STOCKS AND FLOWS

Stock: Stock variable refers to that variable, which is measured at a particular point of time.

For Example, stock is the quantity of items in the warehouse on a certain day. Of course, stock quantities can be increased or decreased at any time, but the concept of flow applies when examining changes in stock levels over a given length of time.

Flow: Flow variable refers to that variable, which is measured over a period of time.

For Example, production of goods during the month of December 2024, birth rate in the year 2024, National Income in the year 2024 are Flow variables.

DIFFERENCE BETWEEN STOCK & FLOW

Stock

It refers to that variable which is measured at a particular point of time.

Stock is not time dimensional as it is measured at a particular point of time.

It is a static concept.

eg. wealth, distance of Delhi to noida, stock of water in a tank, bank deposits, capital, population on a particular date etc.

Flow

It refers to that variable which is measured at a particular period of time.

Flow is time dimensional as measured only for a particular period of time.

It is a dynamic concept.

e.g. pocket allowances, speed of a car travelling Delhi to Noida, flow of water from tank, demand, supply, consumption exp., savings, profit or loss, national income, production, GDP, Investment etc.

CIRCULAR FLOW IN AN ECONOMY

APPROACHES TO MEASURING GDP & NNP at FC USING INCOME, VALUE ADDED, EXPENDITURE METHOD

INCOME METHOD

Steps to measuring GDP & NNP at FC in the Income Approach

The following steps are involved in using the Income Method to estimate domestic & national income:

Step 1: Determine and group the manufacturing units.

Primary, secondary, and tertiary sectors are used to categorize and identify all producing businesses that use different factors of production.

Step 2: Calculate the factor income that each sector pays.

The following headings apply to the various incomes that each sector pays: (i) Employee Compensation; (ii) Rent and Royalties; (iii) Interest; (iv) Profit; and (v) Mixed Income.

Step 3: Calculate Domestic Income (NDP)

The total of the factor incomes from all the sectors yields domestic income (NDP). To put it simply, NDP FC = Employee Compensation + Rent and Royalty + Interest + Profit + Mixed Income

Step 4: To calculate national income(NNPFC), estimate net factor income from abroad (NFIA)

The last step is to calculate National Income (NNPFC) by adding NFIA to domestic income. i.e NNPFC = NDP FC + net factor income from abroad

PRECAUTIONS OF INCOME METHOD

1. Transfer Income are not included in the National Income.

2. Income from sale of second hand goods will not be included.

3. Income from sale of shares, bonds, and debentures will not be included.

4. Windfall gains will not be included.

5. Payments out of past savings will not be included.

6. Imputed value of services provided by owners of production units will be included.

Expenditure method

Steps to measuring GDP & NNP at FC in the Expenditure Approach

The following steps are involved in using the Expenditure Method to estimate domestic & national income:

Step 1: Determine the Economic Units incurring Final Expenditure

Four groups comprise all economic entities that incur final expenditures within domestic territory: (i) Household sector; (ii) Government sector; (iii) Producing sector; (iv) Rest of the world sector.

Step 2: Classification of Final Expenditure

The expected final costs incurred by the economic units listed above are categorized under the following headings:

• Private Final Consumption Expenditure (PFCE)

• Government Final Consumption Expenditure (GFCE)

• Gross Domestic Capital Formation (GDCF)

• Net Exports (X-M).

Gross Domestic Product at Market Price (GDPMP) is the total of the four final expenditure components, or GDP MP = PFCE + GFCE + GDCF + (X-M)

Step 3: Calculate Domestic Income (NDP FC)

Domestic income is obtained by deducting the amount of depreciation and net indirect taxes from GDPMP, or NDP FC = GDP MP – Depreciation – Net Indirect Taxes.

Step 4: To calculate national income, estimate net factor income from abroad (NFIA).

The last step is to calculate national income by adding NFIA to domestic income.

NDPFC + NFIA = National Income (NNP FC)

PRECAUTIONS OF EXPENDITURE METHOD

1. Expenditure on intermediate goods will not be included in the National Income.

2. Transfer payments are not included.

3. Purchase of second hand goods will not be included in the National Income.

4. Purchase of financial assets will not be included.

5. Expenditure on own account production will be included.

Value Added Method

Steps to measuring GDP & NNP at FC in the Value Added Method

The following steps are involved in using the Value Added Method to estimate domestic & national income:

Step 1: Recognize and group the manufacturing units

Identifying and grouping all of an economy's producing enterprises into primary, secondary, and tertiary sectors is the first stage.

Step 2: Calculate the GDP at market price

The Gross Value Added at Market Price (GVAMP) of each sector is determined in the second stage, and the total GVAMP of all sectors yields the GDP at MP, i.e. $\sum$GVAMP = GDP MP

Step 3: Calculate Domestic Income (NDP FC)

Domestic income is obtained by deducting the amount of depreciation and net indirect taxes from GDPMP, or NDP FC = GDP MP – Depreciation – Net Indirect Taxes.

Step 4: To calculate national income, estimate net factor income from abroad (NFIA).

The last step is to calculate national income by adding NFIA to domestic income.

NDPFC + NFIA = National Income (NNP FC)

PRECAUTIONS OF VALUE ADDED METHOD

1. intermediate goods are not to be included in the National Income.

2.Sale and Purchase of second hand goods will not be included in the National Income.

3. Production of services for self-consumption (Domestic services) are not included in National Income.

4.Production of goods for self-consumption will be included in National Income.

5. Imputed value of owner-occupied houses should be included.

6. Change in stock of goods will be included.

7. Sale and Purchase of shares, bonds, and debentures(new and old) will not be included.

GDP DEFLATOR

Inflation is measured using the GDP deflator, sometimes GDP deflator also referred to as the **implicit price deflator** and **Price Index**. It is used to calculate the average annual price level of new domestically produced final products and services in a nation.

The nominal GDP and real GDP are the two key components of the GDP deflator.

Nominal GDP & Real GDP definition

For calculating GDP deflator, the following steps are necessary.

• Determine the nominal GDP.
• Determine the real GDP.
• Find the GDP Deflator.

GDP deflator formula can be represented as:

GDP deflator = Nominal GDP/Real GDP * 100

GDP DEFLATOR Example:

If Nominal GDP (2023 - Current year) is ₹ 250 & Real GDP (2015 - base year) is ₹ 200

GDP deflator = Nominal GDP/Real GDP * 100

GDP deflator = 250/200 * 100

GDP deflator = ₹ 125

If we minus 100 from value of GDP deflator or price index, then we get Inflation rate.

Inflation Rate = Price Index – 100

Inflation Rate = 125 – 100

Inflation Rate = 25 %

NOMINAL GDP & REAL GDP

Nominal GDP or GDP at Current Price :

Nominal GDP is the Gross Domestic Product of a country of a given year, estimated on the basis of the price of the goods and services of the same or current year. Nominal GDP formula can be represented as:

Nominal GDP = (Real GDP × Price Index) / 100

Real GDP or GDP at Constant Price:

Real GDP is the Gross Domestic Product of a country of a given year, estimated on the basis of the price of the goods and services of a base year. Real GDP formula can be represented as:

Real GDP = Nominal GDP/ Price Index × 100

Difference between Nominal GDP and Real GDP

Nominal GDP

1. meaning: When GDP is measured at the current year prices it is called Nominal GDP

2. Inflation: It is inflation adjusted GDP.

3 Economic Growth: It is not a true indicator of economic growth and welfare.

4. Alternative name: It is also known as GDP at Current Price

5. Value of GDP: Due to the current market changes, its value is much higher.

Real GDP

1. meaning: When GDP is measured at the base or constant year prices it is called Real GDP.

2. Inflation: It is without effect of inflation

3. Economic Growth: It is true indicator of economic growth and welfare.

4. Alternative name: It is also known as GDP at Constant Price

5. Value of GDP: Since the base year's market price is considered, the value is much lower.

GDP AND THE UNDERGROUND ECONOMY

THE UNDERGROUND ECONOMY

An underground economy, alternatively known as a shadow economy, is an economy where all the transactions that take place are unrecognized by the government.

An underground economy definition can refer to an economy where transactions do not undergo taxation and regulation due to the secret nature of the business conducted. The underground economy mainly deals with illegal or legal businesses that do not want to incur extra costs of paying for licenses and insurance.

Some legal businesses paramount in the underground economy are the self-employment or barter trade, babysitting, and construction, and the illegal businesses include illegal gambling, fraudulent activities, trafficking, or smuggling. A college professor does not fall under the underground economy since they have formal employment terms, including paying taxes.

It is also known as

- Black market: This term specifically refers to the illegal sale of goods and services.
- Informal Economy: This term is broader and encompasses all economic activity that is not regulated or taxed by the government, including both legal and illegal activities.

- Shadow Economy: This term emphasizes the fact that these activities take place outside the official view of the government.

GDP AND SOCIAL WELFARE

The GDP is frequently used as a gauge to assess people's welfare. In this context, "welfare" refers to people's sense of material well-being. The availability of goods and services per person determines the welfare of people. It implies that a nation's GDP should rise since it represents increased welfare for its citizens.

However, higher GDP does not always mean greater welfare for people because of the following reasons:

1. Distribution of GDP

Inequalities in the distribution of income among individuals can occasionally increase in tandem with a rising GDP. An increase in the wealth gap between the rich and the poor is referred to as inequality in income distribution. The Gross Domestic Product does not account for shifts in a nation's income distribution. As a result, a gain in GDP does not always translate into an improvement in people's welfare.

2. Non-Monetary Exchanges

In an economy, there are a lot of things that affect people's financial prosperity but are not quantifiable in monetary terms, such housekeeping services and kitchen gardening. Due to a lack of data, some activities are excluded from the calculation of GDP. As a result, it's possible that the GDP has increased despite their being no rise in monetary exchanges.

3. Change in Prices

There are instances when an economy's GDP grows as a result of rising prices for goods and services rather than as a result of increased production of such products and services. In these situations, using GDP as a gauge of wellbeing is unreliable.

4. Externalities

Any advantage or harm from an activity that is caused by a person or an organization for which they are not compensated or subject to sanctions is referred to as an externality. Externalities come in two flavors: negative externalities and positive externalities. Activities that have a positive externality are those that help other people. For instance, individuals use public parks for recreational purposes without charging admission. Welfare rises as a result of positive externalities. On the other hand, actions that cause harm to others are known as Negative Externalities. For instance, pollution brought on by individuals and businesses, for which they are not usually held accountable. Welfare declines as a result of negative externalities.

5. Rate of Population Growth

When determining the GDP of an economy, changes in a nation's population are taken into account. There will be a negative effect on the economic prosperity of a nation if its population growth rate exceeds its GDP growth rate. It occurs as a result of the declining per capita availability of goods and services brought on by population growth.