**NATIONAL INCOME ACCOUNTING**

National income accounting is a term used in economics to refer to the bookkeeping system that a national government uses to measure the level of the country's economic activity in a given time period. Such records include total revenues earned by domestic corporations, wages paid to foreign and domestic workers, and the amount spent on sales and income taxes by corporations and individuals residing in the country.

National income accounting provides economists and statisticians with detailed information that can be used to track the health of an economy and to forecast future growth and development. Although national income accounting is not an exact science but it provides useful insight into how well an economy is functioning, and where money are being generated and spent.

**Concept of National Income**

National income has several concepts that are interrelated, they includes; National income concepts include Gross Domestic Product (GDP), Gross National Income (GNP), Net National Product (NNP), Net National Income (NNI), Disposable Income (DI), Real Income (RI), GDP at factor cost, and GDP at market price, etc

**Gross Domestic Product (GDP)**

The gross domestic product is the summation of all the values of goods and services produced in a country by the nationals and non-nationals. It does not include incomes and property earnings of the nationals abroad neither does it exclude the incomes and property earnings of the non-nationals in the country.

Gross domestic product is the **market value** of all the **final goods and services** that are produced in a country **during a given period of time**, usually in a year by all factors of production located within a country.

The key words in the above definition are **“market value”**, “**final goods and** **services**”, “**produced within a country during a given period of time.**”here we explain these keywords and why they are important in definition of Gross domestic product (GDP).

1. **Market Value**

Gross Domestic Product or National Income is an aggregation of the market values of all the goods and services produced in the economy in a given period. You should note that goods and services that are not sold in the markets such as unpaid house works are not counted in GDP*. Important exceptions in this regard are goods and services provided by the government (they do not have market value) which are included in GDP as the government’s cost of providing them.*

**ii. Final Goods and Services**

In this case, we should note that not all goods and services that have a market value are counted in GDP. GDP includes only those goods and services that are the end product of the production process which are called final goods and services.

Many goods are used in the production process. For example, in order for a producer to produce a yam flower, yam must be planted and harvested, the yam must thereafter be pilled, dried to have a dried yam and then grinded to become a yam flower. Out of the process as mentioned earlier, that are used in the production of the yam flower, it is only the yam flour that is used by the consumers, since the production of the yam flour is the ultimate aim of the process, and the yam flour is therefore called a final good.

It can therefore be seen that a final good or service is the end product of the production process, or the product or service that consumers actually use. The goods and services produced in the process of making the final product (in our example, the yam and the dried yam) are called intermediate goods and services.

Since we are only interested in measuring items that are of direct economic value, only final goods and services are therefore included in the calculation of GDP. Intermediate goods and services which are used up in the production of final goods and services are not counted.

It should however be noted that some goods can either be intermediate or final. A special type of good that is difficult to class as intermediate or final is a capital good. A capital good is a long-lived good which is itself produced and used in producing other goods and services, e.g., factories, equipments and machines. Capital goods do not fit into the definition of final goods since their purpose is to produce other goods. Also, they are not intermediate goods, because they are not used up during the production process except over a very long period of time. Thus, for the purpose of measuring GDP, economists have agreed to classify newly produced capital goods as final goods so as to avoid double counting.

To illustrate the distinction between final goods and intermediate goods, let us consider the following examples:

.**Illustration 1:**

Suppose that a bag of grain has a market value of ~~N~~25 (twenty naira, the price the milling company paid for the grain). If the grain then is milled into flour, which has a market value of ~~N~~50.00 (the price the baker paid for the flour). The flour is then made into a loaf of bread worth ~~N~~150.00 in the market.

In calculating the contribution of these activities to GDP, we cannot add together all the values of the grain, flour and bread, this is because the grain and flour are only intermediate goods used in the production of bread. So, the total contribution to GDP is ~~N~~150.00 which is the market value of the loaf of bread, the final product.

**Illustration 2:**

A tailor charges ~~N~~1000.00 for each cloth that she makes. The tailor pays her shop apprentice ~~N~~100.00 per cloth made in return for sweeping the floor and other chores. For each clothe sown, what is the total contribution of the tailor and her apprentice to GDP?

Answer:

The answer to this question is simply 1000.00 which is the market value of each cloth sown. This service is counted in GDP because it is the final service, the one that actually has value to the final user. The services the apprentice provided are intermediate services and have value only because the services contributed to the production of the making of the cloth; thus, they are not counted in GDP.

As earlier pointed out, intermediate goods are not counted in GDP to avoid double counting. Double counting can also be avoided by counting only the value added to a product by each firm in the production process.

**Illustration 3:**

A farmer produces ~~N~~1, 000 worth of cattle milk. He sold ~~N~~300 worth of milk to his friends and uses the rest of the milk to feed his livestock, which he at the end sold to his friends for ~~N~~1, 500. What is the farmer’s contribution to GDP?

Answer:

The milk the farmer produced serves as an intermediate good and part as a final good. The ~~N~~700 (~~N~~1, 000 minus ~~N~~300) worth of cattle milk that was fed to the livestock is an intermediate good, thus, it is not counted as part of GDP. Whereas, the ~~N~~300 worth of cattle milk sold to his friend is a final good. So, it is counted. Thus, final goods in the examples above are the ~~N~~300 worth of cattle milk and the ~~N~~1, 500 worth of livestock that the farmer sold to his friend. Adding ~~N~~300 to ~~N~~1, 500 makes ~~N~~1, 800 which is the farmer’s contribution to GDP.

As earlier pointed out, intermediate goods are not counted in GDP to avoid double counting. Double counting can also be avoided by counting only the value added to a product by each firm in the production process; the value added method would be explained later in the course of the study.

**iii. Produced within a Country during a given Period**

The word ‘domestic’ used in the definition of gross domestic product tell us that GDP is a measure of economic activities within a given country. Therefore, only goods and services produced with the country’s borders are counted. For example, the GDP of Nigeria includes the market value of all goods and services produced within the Nigerian borders even if they are made in foreign-owned industries or are produced by foreigners. Also, goods and services produced in Ghana by a Nigerian based company like Globacom, etc. are not counted. In addition, only goods and services produced during the current year, or the portion of the value produced during the current year, are counted as part of the current year’s GDP.

In sum, the output produced by Nigerians abroad for example, Nigerian citizens working for a foreign company is not counted in Nigeria’s GDP because the output is not produced within Nigeria. In the same vein, profits earned abroad by Nigerian companies are not counted in Nigeria’s GDP. However, the output produced by foreigners working in Nigeria is counted in Nigeria’s GDP because the output is produced within Nigeria. Also, profits earned in Nigeria by foreign-owned companies are counted in Nigeria’s GDP. For example, while the output of foreigners working in Shell, Exxon, Mobil, etc are counted as part of GDP, output produced by Nigerians abroad are not counted.

**Illustration 4:**

Suppose a 10 year old house is sold to Mr. Olusanya Samuel for ~~N~~5 million and Mr. abdulrah of bello pays the real estate agent in charge of the sales a commission of one per cent which is ~~N~~50,000 (1/100 x ~~N~~5 million). The contribution of this economic activity to GDP is only ~~N~~50, 000. Generally, purchases and sales of existing assets such as old houses or used cars, do not contribute to the current year’s GDP.

Since the house was not produced during the current year, its value (~~N~~5, million) is not counted in this year’s GDP. This is so because the value of the house has already been included in the GDP 10 years ago which was the year the house was built. However, the ~~N~~50, 000 will be included in GDP because the ~~N~~50, 000 fee paid to the real estate agent represents the market value of the agent’s services in helping Mr. Olusanya Samuel to find and purchase the house. Since these services were provided during the current year the agent’s fee is counted in the current year’s GDP.

**NOTE:** The followings are not included in the calculation of GDP:

1. Goods and services that have no market value are not included in GDP because it would be impossible to have a correct estimate of their market prices. Such goods and services that have no market value include those rendered free of charge. Examples include the bringing up of a child by the mother, songs recited to friends by a musician etc.
2. Intermediate goods and services are not included in GDP. This is because many of the intermediate goods pass through a number of production stages or processes before they are finally purchased or consumed. If these products are now counted at every production stage, they would be included many times in GDP leading to the problem of double counting,and as a result, the GDP would increase or be overstated. Therefore, to avoid double counting, only the market value of the final products and not the intermediate products should be included in GDP.
3. The transactions that do not arise from current year product or which do not contribute in any form to production are excluded in GDP. Thus, the sale and purchase of old goods, fairly used goods, and of shares, bonds and assets of existing companies are all excluded in GDP because they do not make any addition to national product, and the goods are simply transferred.
4. Likewise, transferred payments (monies that you do not work for) such as payments received under social security e.g., unemployment insurance allowance, scholarship, bursary, gifts and bequests, old age pension, and disability pension are also not included in GNP because the recipients do not provide any service for them.
5. The profits earned or losses incurred on account of changes in capital assets as a result of the fluctuations in market prices are not included in GDP if and only if they are not responsible for the current year’s production or current year’s economic activity. For example if the price of a house increases due to inflation, the profit earned by selling such a house will not be part of GDP, but if a portion of the house is constructed anew during the current year, the increase in the value of the house (after deduction of the cost of the newly constructed portion) will be included in GDP.

Similarly, variations in the value of assets which can be ascertained beforehand and that are therefore insured against uncertainties such as flood, fire, etc, are not include in GDP. Note however that the depreciation of machines, plants and other capital goods is not deducted from GDP.

1. Income earned through illegal activities such as smuggling, drug trafficking, children trafficking, prostitution etc are not included in GDP. Also, goods sold in the black market, are excluded although they are priced (they have market value) and fulfills the needs of the people but from the social point of view, they are not useful, and thus, the income received from their sales and purchases is always not included in GDP.

There are several reasons for the exclusion of illegal activities and black market transactions from GDP:

First, it is uncertain whether or not these products were produced during the current year or the preceding years.

Secondly, many of the products involved in smuggling are foreign made products and are smuggled into the country; thus, are not included in GDP because they are not produced within the border of the domestic country.

**Problem of Computation of GDP**

1. Problem of double counting or multiple counting: This problem arises when applying the output-expenditure method to estimating national income. If we add the market value of the output of all firms we would obtain a total that is greatly in excess of the value of output actually available to consumers (households). To avoid this difficulty, National income accountant use the value of the firm’s output less the value of the inputs purchased from other firms Therefore, a firm’s output is defined as the value-added. The summation of all the value added would give the value, of all the goods and services produced in the economy. This allows us to differentiate between intermediate product and final product. Intermediate products are goods used as inputs in a further stage of production while final products are the outputs of the economy after eliminating double counting.
2. The problem of definition of conceptual variables That is, the problem, of deciding what to include in the national income accounting and what not to include. For example, the exclusion of the services of full housewives in shopping and performing other domestic works and the recognition given to it when performed by a paid house maid in national income accounting.
3. The problem of owner-occupier properties: This is somehow related to the second problem highlighted above in the sense that it bothers on what to include or not to include in the national income estimate. The practice is to input a value representing the normal rent which the owner could have paid had the property been let.
4. The distinction between receipts and payments of income and transfer payments.
5. Statistical problems - the problem of information or data collection, collation and analysis. Often inadequate information would lead to errors in national income accounts.

Problems of treating depreciation. The way depreciation is recognized and treated varies from one firm to other, because there are many methods of calculating this depreciation and all them give different values