

The different methods of measuring National Income

Three methods

Three alternate methods can be used to calculate a country's national income:

1. The Product method
2. The Income method
3. The Expenditure method

1. Method of Product:

This is alternatively called output method or production method. In this particular method the value added by each enterprise in the manufacture goods and services is computed. Alternatively, this is called the output technique or process of processing. In this particular process, the value added by each company in the production of goods and services is measured. The value added by an enterprise is achieved by neglecting the cost incurred by the enterprise on intermediate goods, such as raw materials and unfinished goods (obtained by other businesses from the value of the enterprise's production output).

The value of an enterprise's output is equal to the physical output (A) generated multiplied by the market price (B), i.e., A.B. We deduct the consumption of fixed capital (i.e. depreciation) from the price added by each business to give the effect of the net value added at market prices (NVAMP).

However, each business in the economy needs to measure net value added at factor cost (NVAFC) for calculating national income (i.e. Net National Product at Factor Cost (NNPFC)). By subtracting net indirect taxes, NVAFC can be found.

This approach is used to bifurcate the economy into different industrial sectors , such as agriculture, fisheries, mining, construction , manufacturing, trade and trade , transport, communication and other services. The total value added at factor cost (NVAFC) is previously

calculated by each and every productive enterprise as well as by each and every industry or business.

It follows from above that we have to deduct the following from the value of production of an enterprise in order to attain the net value added at factor expense by an enterprise:

1. Intermediate consumption which is the value of goods such as raw materials, fuels which are purchased from other firms.

2. Consumption of fixed capital (i.e., depreciation)

3. Net indirect taxes.

The summation of Net Value Added at Factor Cost (NVAFC) by all participating enterprises in an industry or sector gives us the net value added at factor cost for each sector or sector. We then apply net values contributed at factor cost by all industries or sectors in order to obtain net domestic product at factor cost (NDPFC). Finally, we add the net factor revenue from abroad to the net domestic product to obtain net national factor cost product (NNPFC), which is often referred to as national profits.

$$NI \text{ or } NNPFC = NDPFC + \text{Net overseas income factor}$$

Where there is an output census for the year, this method of national income calculation can be used. Only essential industries are known for their manufacturing data in many countries. Therefore, this technique is used to generate national income along with other methods. One of the great advantages of this strategy is that, by demonstrating their respective national income contributions, it shows the relative importance of the different sectors of the economy.

2. Method of Income:

National income under this scheme is calculated as a flow of factor income. Four factors are generally active labour, capital, land and entrepreneurship. Labour receives wages and salaries, capital receives interest, land receives rent, and entrepreneurship receives profit as their reward.

Furthermore, some self-employed individuals employ their own labour and money, such as doctors, advocates, CAs, etc. Their wealth is called Mixed Income. The sum-total of all these variable revenues is called NDP at factor cost.

"Net domestic income is the income produced by all producers (normal residents and non-residents) in an accounting year in the form of salaries, rent , interest and benefit in the domestic territory of a country," Economist Haton once said.

(a) Method:

The Income Method assesses public pay on the side of payments made to the primary (chief) output factors for the fruitful services in an accounting year, which are rent, salaries, interest and profit. National income is therefore determined by summing up all the factor income produced by all the producing units located during the accounting period within the domestic territory of the country.

The resulting amount is called Domestic Income or Net Domestic Product at FC (NDPFC)-We get National Income by including net factor pay from abroad to domestic income (NNPFC) by including net factor pay from abroad to domestic income-Note, national income is resolved in this strategy approach at the stage when factor income is paid out by endeavours to owners of land, labour , capital and business output factors.

Because the net value included by a company is the addition of production factor services, the equivalent is thus listed as production factors for money income (rent, salaries, interest, etc.). Hence, estimation of national income method should be equivalent to the one determined by value added method.

(b) Steps Involved:

Following are the primary steps associated in assessing national income by income method:

- Recognize businesses that use the four main development factors (land , labour , capital and business).
- Factor payments are bifurcated into different types of categories such as rent , salaries, interest, benefit and mixed income (or factor payments are defined as staff benefits, mixed income and operating excess).
- Estimate the calculation made by each pursuit of factor payments.
- Summary of all local-terrain factor payments to receive domestic income (NDP at FC).
- Estimation of overseas or overseas net factor income that is applied to domestic income to generate national income.

(c) Precautions:

For precise calculation of national income by income method, following safety measures are necessary to be taken :

- It contains only the revenue element that is earned by interpreting productive amenities. None, but all forms of transfer income are exempt, such as old-age pension, unemployment allowance, etc.
- The selling and purchase of second-hand goods (used goods) is not included because they are not part of the production of the current year but are included in the commission charged on the sale of second-hand goods as it is a reward for the provision of productive services. Likewise, the sale of shares goes forward and bonds are removed.
- Imputed rent of owner-engaged homes and output value for self-consumption are included, but the value of self-consumed services such as housewife services is then omitted.
- Revenue from illicit activities such as smuggling, black-marketing, etc., and windfall profits (e.g. from lotteries) are not included.
- Direct taxes (e.g. income tax) charged by workers on their salaries and corporate tax payable by the joint stock corporation on their profits are included. They are believed to be charged from past investments and wealth while wealth tax and gift tax are not included. Similarly, indirect taxes are exempt, such as income taxes and excise duties, which appear to raise retail prices.

3. Method for Expenditure:

The expenditure method generates national income by summing up all expenditures for goods and services over a year. Earnings may be invested on either consumer goods or capital goods. Again, it can be invested by private individuals and households or government and business enterprises.

Furthermore, individuals spend on the goods and services from foreign countries that a country sells to them. Likewise, citizens of a nation invest in imports of goods and services from other nations. We add the following forms of expenditure by families, government, and productive firms to obtain national income.

In this system, national income is measured as a spending flow. GDP is the sum-total of private consumption spending. Government consumption spending, aggregate capital development (government and private) and net exports (export-import).

- Expenditure of consumer products and services by individuals and families. This is called final private consumption expenditure, and is denoted by C.
- State expenditure on goods and services to meet public needs. This is considered the country's ultimate expenditure on consumption, and is denoted by G.
- The investment in capital goods and inventories or stocks by productive enterprises. This is referred to as gross domestic capital or gross domestic investment development, and it is denoted by either I or GDCF.

(a) Method:

This method measures national revenue as the combined amount of consumers, business firms, governments and foreigners' final expenditures made over the course of a year. In all sectors of the economy, investment is carried out by households, companies, governments and the foreign market. Thus, under the expenditure system, national income is calculated at the point of actual expenditure. In other words, this strategy is supplemented by consumer expenditure, infrastructure spending, government expenditure and net exports. However, the spending form excludes expenditure on second-hand products and the purchase of shares and bonds. The spending system is often referred to as the Method of Complete Outlay.

The formula for calculating national expenditure is

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

Where,

X = Exports

M = Imports

I = Investment

G = Government spending

C = Consumption by residents of the nation

$$\text{Or } NI = NX + I + G + C$$

Where,

$$\text{Net Exports (NX)} = \text{Exports} - \text{Imports}$$

The most popular way of measuring the GDP of a country is the expenditure process.

(b) Limitations :

It is predicted that GDP will measure a country's standard of living and economic health. Nobel Prize-winning economist Joseph Stiglitz cautioned that GDP should not be taken as an all-encompassing indicator of a society's well-being, because it ignores significant factors that make people happy.

(c) Precautions :

The following steps should be taken when calculating Gross Domestic Product by the expenditure method or evaluating final expenditure on Gross National Product:

- Second hand good: Since second hand products do not contribute to the production of products and services in the current years, this should not be included in the GDP.
- Purchase of shares and bonds: Spending on the purchase of old shares and bonds from other individuals and from business firms should not be included in the measurement of the Gross Domestic Product by the expenditure process. This is because bonds and shares are mere financial claims and do not represent investments in the actual output of goods and services.
- Moreover, spending on government transfer services, such as unemployment insurance and old-age pensions, should not be taken into account, because no goods or economic resources are produced in return for the recipients of these payments.
- Farmers 'expenditure on intermediate materials such as fertilisers and crops and fabric producers' expenditure on wool , cotton and yarn should also be excluded. This is because we have to avoid double counting. Therefore, to calculate the Gross Domestic Product, we only have to consider expenditure on final goods and services.

Resources :

<https://www.investopedia.com/terms/e/expenditure-method.asp>

<https://byjus.com/commerce/expenditure-method/>

<https://www.economicdiscussion.net/>