

Gross Domestic Product (GDP_{mp})

The GDP_{mp} is the money value of all final goods and services at prices prevailing in the market produced in the domestic territory of a country in a year's time. The value of factor income from abroad which is earned by the residents of a country is not included in the calculation of GDP. The various sectors of a country engaged in the production activities produce normally a certain amount of goods and services like rice, fertilizers, cement, steel, services of doctors, teachers, engineers, advocates, etc. The money value of all these goods and services taken together gives us the GDP_{mp}. Thus,

$$\text{GDP}_{\text{mp}} = \text{GNP}_{\text{mp}} - \text{Net factor income from abroad}$$

Net Domestic Product at Market Prices (NDP_{mp})

Net domestic product at market prices (NDP_{mp}) is defined as the money value of final goods and services produced by the residents within the domestic territory of a country in a year's time less consumption of fixed capital/depreciation. Depreciation or consumption of fixed capital is the value of wear and tear of capital goods in the process of production. To get the real increase in availability of goods in the economy, deducting of depreciation value is necessary.

$$\text{NDP}_{\text{mp}} = \text{GDP}_{\text{mp}} - \text{Depreciation}$$

$$\text{NDP}_{\text{mp}} = \text{GNP}_{\text{mp}} - \text{net factor income from abroad} - \text{Depreciation}$$

Net National Product at Market Price (NNP_{mp})

NNP_{mp} is the market value of all goods and services produced by residents of a country after allowing for depreciation. Thus,

$$\text{NNP}_{\text{mp}} = \text{GNP}_{\text{mp}} - \text{Depreciation}$$

$$\text{NNP}_{\text{mp}} = \text{NDP}_{\text{mp}} + \text{net income from abroad}$$

NNP_{mp} is a more accurate measure of the true output of the economy than GNP_{mp}.

Gross Domestic Product at Factor Cost (GDP_{fc})

GDP at factor cost is the measure of gross domestic product in terms of earnings of factors of production. It is the sum total of wages, interest, rent etc, within the domestic territory of a country. To get GDP_{fc}, we use the following,

$$\text{GDP}_{\text{fc}} = \text{GDP}_{\text{mp}} - \text{Net indirect taxes (indirect taxes - subsidies)}$$

$$\text{GDP}_{\text{fc}} = \text{GNP}_{\text{mp}} - \text{Net factor from abroad} - \text{net indirect taxes}$$

Gross National Product at Factor Cost (GNP_{fc})

It is the sum total of earnings received by various factors of production in terms of wages, rent, interest etc, by the normal residents of a country.

$$\text{GNP}_{\text{fc}} = \text{GNP}_{\text{mp}} - \text{Net indirect taxes}$$

$$\text{GNP}_{\text{fc}} = \text{GDP}_{\text{mp}} - \text{Net indirect taxes} + \text{net factor from abroad}$$

Net Domestic Product at Factor Cost (NDP_{fc})/Domestic Factor Income

Net domestic product at factor cost is the measure of the domestic product in terms of earnings of factors of production within domestic territory of a country. Thus,

$$\text{NDP}_{fc} = \text{GDP}_{fc} - \text{Depreciation}$$

National Income OR Net National Product at Factor Cost (NNP_{fc})

It is the value of all final goods and services produced by the residents of a country—operating both in domestic territory and outside the country—at their factor cost. In simple words, it is the factor income accruing to the residents of a country. In brief,

$$\text{National Income/NNP}_{fc} = \text{domestic factor income} + \text{net factor income from abroad}$$

$$\text{National Income/NNP}_{fc} = \text{GNP}_{fc} - \text{depreciation}$$

As payments to the factors of production are the factor cost of production, national income is also called as NNP at factor cost.

Private Income

Private income is the current income earned from all sources of private sector consisting of private enterprises and factor owners, within the domestic territory of a country and abroad. It does not include the income accruing to the government from its property and commercial enterprises and also saving of non-departmental enterprises. However, transfer income received by the private sector is included. Moreover, interest on public debt which private sector receives is also added to the private income. In brief:

$$\begin{aligned} \text{Private Income} = & \text{national income} - \text{income from property and} \\ & \text{entrepreneurship accruing to the government-saving} \\ & \text{of non-departmental enterprises} + \text{interest on national} \\ & \text{debt} + \text{current transfers from government} + \text{net} \\ & \text{current transfers from the rest of the world} \end{aligned}$$

Personal Income

The personal income refers to the sum total of all current incomes received by the individuals or households from all sources within the domestic territory of a country during an accounting year. It is to be noted that a certain part of the income earned by an individual in a year may not be actually received. For instance, undistributed profits and corporate taxes paid by the enterprises and net retained earnings of foreign companies may not be actually received by the persons. Moreover, personal income includes not only factor incomes but also transfer earnings etc. Thus,

$$\begin{aligned} \text{Personal income} = & \text{Private income} - \text{undistributed profits} - \text{corporate} \\ & \text{taxes} - \text{net retained earnings of foreign companies} - \\ & \text{contributions for social security.} \end{aligned}$$

$$\begin{aligned} \text{Personal income} = & \text{National income} - \text{undistributed profits} - \text{corporate} \\ & \text{taxes} - \text{net retained earnings of foreign companies} - \\ & \text{contributions for social security} + \text{transfer payments.} \end{aligned}$$

Personal Disposable Income

Personal disposable income refers to that part of personal income which is actually available to households for consumption and saving. In other words, it is the income of a person which he can spend as he desires. An individual or households have many compulsory payments to make in the real life. These are income tax, property tax, and other receipts of the government. After deducting the amount of such payments, one has the income to be spent at one's wish. Therefore,

$$\text{Personal disposable income} = \text{personal income} - \text{personal taxes} - \text{miscellaneous receipts of the government}$$

Suppose you have a earning of Rs. 10,000 every month. You have to pay some compulsory payments such as income tax, fees, and other miscellaneous receipts such as water tax, telephone bills etc, and these amounts to, say, Rs. 2000. Then, your personal disposable income is Rs. 8000, which you can spend for food, clothing and other expenses of family.

National Disposal Income

Net national disposal income is measured by adding to national income net indirect taxes and other current transfers from abroad. Thus,

$$\text{Net national disposal income} = \text{national income} + \text{net indirect taxes} + \text{net current and capital transfers from abroad.}$$

Income from Domestic Product Accruing to Private Sector

Income from domestic product accruing to the private sector refers to that part of domestic product at factor cost which accrues to the private sector in an accounting year.

Transfer Payments

These are the payments made by the government to households, enterprises and non-profit institutions and vice-versa without any promise to supply goods and services. E.g., payments made to households by the government in the form of unemployment allowance, old-age pension, scholarships, etc. Similarly, direct taxes and indirect taxes, gifts, etc., given by the households to the government are transfer payments. Direct taxes are those taxes, the burden of which cannot be shifted to others. For example, when government levies income tax on our income, we have to pay it ourselves. We cannot make others to pay our income tax. Thus burden of the tax has to be borne by us. Indirect taxes are those taxes, the burden of which can be easily shifted to others. For example, sales tax imposed on various goods are first paid by sellers and then by ultimate consumers. Sellers shift the tax by adding it to the price of goods thereby increasing the price of the products. Subsidies, investment allowance, etc., given by the government to enterprises are also transfer payments. Subsidies are given by the government to producers so that prices of certain products can be kept low. Generally, when a tax is imposed or increased, prices of goods in the market rise which makes poor class to suffer. In such a situation, government may grant subsidies to producers to lower the price. Similarly, corporate taxes, excise duties, custom duties and gifts from enterprises to the government are also transfer payments.

Transfer payments do not contribute to the flow of goods and services. In other words, transfer payments do not generate any factor income therefore; these should not be included in the GDP.

CURRENT TRANSFER PAYMENTS AND CAPITAL TRANSFER PAYMENTS

A distinction is made between current transfers and capital transfers as under.

Current transfer payments are made from the current income of the payer and added to the current transfers' income of the recipient for consumption expenditure. Current transfers affect consumption.

Capital transfer payments are payments in cash and in kind which are used for gross capital. These are made out of wealth or past saving of the payer. Capital transfers influence the level and rate of capital formation in the economy.

RELATIONSHIP AMONG IMPORTANT NATIONAL INCOME AGGREGATES

The relationship among important national income aggregates can be analyzed as under:

1. $GDP_{mp} = \text{Price} \times \text{Quantity of final goods and services}$
2. $NDP_{mp} = GDP_{mp} - \text{depreciation}$
3. NDP_{fc} or domestic income = $NDP_{mp} - \text{net indirect taxes}$
4. NNP_{fc} or national income = $NDP_{fc} + \text{net factor income from abroad}$
5. Private income = $NNP_{fc} - \text{income from property and entrepreneurship arising to the government} - \text{savings of non-departmental enterprises} + \text{national debt interest} + \text{current transfers from government} + \text{other current transfers from the abroad}$
6. Personal income = private income – undistributed profits – corporation taxes – net retained earnings of foreign companies – contributions for social security
7. Personal disposal income = personal income – personal taxes and other miscellaneous receipts of the government
Or consumption + saving

Questions for Review

1. Who publishes 'National Accounts Statistics in India'?
2. Distinguish between Gross Domestic Product at market prices and Net National Product at factor cost.
3. Distinguish between private income and personal income.
4. Distinguish between private income and national income.
5. Giving examples explain the distinction between current transfer payments and capital transfer payments.
6. What are transfer payments? How are they treated in the estimation of national income?
7. How is personal income different from national income?
8. How is net domestic product at factor cost different from gross domestic product at market prices?
9. How is gross domestic product different from gross national product?
10. Define gross domestic product.
11. What are the components of net factor income from abroad?

12. What does the real flow of income show?
13. Does transfer earning enter into national income?
14. Explain the relationship between consumption, production and investment.
15. Distinguish between national income at constant prices and national income at current prices.
16. Define consumption of fixed capital.
17. What are capital goods?
18. What are final products?
19. Define value of output.
20. How is the value of gross output different from gross value added?
21. How is capital loss different from the consumption of fixed capital?
22. Distinguish between intermediate products and final products.
23. What is meant by value added?
24. Does the household sector produce goods and services?
25. Under what title does the CSO publish the annual national income statistics?
26. Distinguish between stock and flow.
27. Distinguish between personal income and disposable income.
28. Explain briefly the methodology adopted in India for estimating the contribution of unregistered manufacturing.
29. Define capital transfer.
30. Define subsidy.
31. What is the principle of circular flow of income and product?
32. Explain circular flow with two sector economy.
33. Explain the concepts of 'leakages' and 'injections' in the circular flow of income.
34. Explain the meaning of non-market activities.
35. What is called 'Green GNP'?
36. What is GNP deflator?

APPENDIX

National income accounting has gained very importance due to its many usefulness. The concept of national income accounting was first mentioned by William Petty in 1676. National income accounting developed after the break down of Second World War. The systematic approach to national income accounting was done by Simon Kuznets and therefore he is also regarded as the father of modern national accounting. National income accounting is the method of preparing national income of a country. It is a statistical statement or classification which shows the value of total goods and services produced in the various sectors of the economy. Thus, national income accounts provide “a quantified framework of output, spending and income”. (Charles Schultz)

While studying national income accounting, students should have a prior knowledge of certain basic concepts, which are briefly summarized as under:

Productive and Non-productive Activities

Any activity which generates income or adds to the flow of goods and services in an economy is called productive activity. On the other hand, those activities which do not add to the flow of goods and services are non-productive activities. A teacher teaching in a college is a productive activity because it involves earning of money. But a teacher teaching his son in his house, though a useful activity in general parlance is not a productive activity because this does not involve earning of money.

Domestic Territory of a Country

It is an important concept used in national income accounting. It includes the following besides the geographical or political boundary:

- (i) Territorial waters including sea-water of a country;
- (ii) Ships and aircrafts owned and operated by the residents of a country between two or more countries;
- (iii) Fishing vessels, oil rigs, and floating platforms operated by the residents in the international waters;
- (iv) Embassies, consulates, high commissions and military establishments of the country located in foreign lands.