Q. 9 Explain the differences between real income and nominal income.

Answer :

On the basis of prices of goods and services, national income can be classified into two forms, which are the real income and the nominal income. When the money value of final produced goods and services are defined at current prices by the country during a given period of time is called nominal income. The nominal income is also known as national income at current prices. Generally, current prices

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refer to the prices which prevail in the year in which goods and services are produced. It should be noted that nominal income can not reflect the actual picture of the economy.

On the other hand, when the final produced goods and services in a year by the country are measured at constant prices is called real income. The real income of the country is also known as the national income at constant prices. Generally, constant prices refer to the price of current goods and services if is expressed at any previous year price as constant or base. It should be noted that real income reflects the true picture of the country. Therefore, it is considered as the true indicator of economic progress of the country.

(b) Gross Domestic Product :

The total money value of all final produced goods and services by a country within the domestic boundary (territory) during a year is called GDP. GDP includes all the income of a country in a year both resident and non-resident producers producing goods and services. It is important to note that it does not include net factor income earned from abroad. Therefore, GDP is always lower than GNP of the country.

Most popularly, GDP can be classified into two important forms. These two forms are discussed as follows –

(i) GDP at market price :

The money value of the final goods and services produced within the domestic boundary of a country in a year is identified as GDP at market price. Usually, it always determines such income which is earned by the government only from domestic sources. In order to calculate the value of GDP, all goods and services produced are multiplied by their respective prices. If $Q_1, Q_2, \ldots\ldots, Q_n$ are 'n' different commodities produced in a year where $P_1, P_2, \ldots\ldots P_n$ are the respective prices then GDP at market price can be defined as –

$$GDP_{MP} = P_1.Q_1 + P_2.Q_2 + \ldots\ldots\ldots\ldots + P_n.Q_n$$

$$= \sum_{i=1}^{n} P_i.Q_i$$

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(ii) GDP at factor cost :

The cost which has incurred by a country in a year for producing final goods and services is called GDP at factor cost. In other words, the income which is received by the factors while for producing final goods and services of country in a year, is called GDP at factor cost. When the net indirect taxes are deducted from GDP at market price then, GDP at factor cost can be obtained. Therefore, net indirect taxes are always included with the GDP at market price and hence GDP at market price is relatively more than GDP at factor cost. Thus,

$$GDP_{FC} = GDP_{MP} - \text{net indirect taxes}$$

It can also be defined as -

$$GDP_{FC} = GDP_{MP} - (\text{Indirect taxes} - \text{Subsidies})$$

$$GDP_{FC} = GNP_{FC} - NFIA$$

(c) Net National Product at Market Price and Net National Product (NNP) at Factor Cost:

The net value of all final produced goods and services by a country in a year is called NNP. If depreciation is deducted from GNP then, NNP can be obtained. Thus,

$$NNP = GNP - \text{depreciation}$$

In broader sense, NNP can be defined into two important ways which are explained as follows -

(i) NNP at market price :

NNP at market price is defined as the net money value of all final produced goods and services of a country during a given period of time. In other words, NNP at market price is the market value of all goods and services produced by the normal residents of a country in any part of the world. Generally, it can be obtained by deducting depreciation from GNP at market price. Again when net factor income from abroad is included with Net Domestic Product (NDP) at market price, NNP at market price can be obtained. Therefore,

$$NNP_{MP} = GNP_{MP} - \text{depreciation}$$

Or,

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$NNP_{MP} = NDP_{MP}$ + net factor income from abroad

Thus, NNP at market price is relatively less than GNP at market price but is more than NDP at market price.

(ii) NNP at factor cost :

NNP at factor cost is defined as the net value of all the factors of production used for producing final goods and services in a country during a given period of time. In other words, the income which is obtained by the factors of production in the form of wages, rate of interest, rent and profit are considered as NNP at factor cost. When the value of net indirect taxes are deducted from NNP at market price, then NNP at factor cost can be obtained. Generally, the net indirect taxes is the difference between indirect taxes and subsidy. Therefore,

$NNP_{FC} = NNP_{MP}$ - net indirect taxes

Thus, it can be stated that NNP_{FC} is significantly less than NNP_{MP}.

(d) Net Domestic Product :

NDP is defined as the net value of all final produced goods and services of a country during a given period of time within the domestic boundary. In other words, NDP is the net value of all goods and services produced by residents and non-residents within the domestic territory of the country. When the value of depreciation is avoided from GDP, the value of NDP can be obtained. Thus

NDP = GDP - depreciation

NDP can be classified into NDP_{MP} and NDP_{FC}. The differences in between these two can be stated as follows -

NDP_{MP} is the market value of all final produced goods and services of a country in a year domestically by avoiding depreciation. Therefore, NDP_{MP} is the net value produced by residents and non-residents of the country domestically. When depreciation is deducted from GDP_{MP} then NDP_{MP} can be obtained. Thus,

$NDP_{MP} = GDP_{MP}$ - depreciation

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Even when net factor income from abroad is deducted from NNP_{MP}, then NDP_{MP} can be found out. Therefore,

$NDP_{MP} = NNP_{MP}$ - net factor income from abroad

Obviously, NDP_{MP} is relatively less than NNP_{MP} and even GDP_{MP}.

On the other hand, NDP_{FC} is the net income earned by factors of production while working within the domestic territory in an accounting period. Therefore, it is the sum of domestic factor incomes. Generally, when net indirect taxes are deducted from NNP_{MP} along with net factor income from abroad then NDP_{FC} can be obtained. Further, when net indirect taxes are deducted simply from NDP_{MP} then NDP_{FC} can be obtained. Thus, NDP_{FC} is the net income earned by all the factors of production domestically in a country during a year. Therefore,

$NDP_{FC} = GNP_{MP}$ - net indirect taxes - net factor income from abroad

Or,

$NDP_{FC} = NDP_{MP}$ - net indirect taxes.

In this way, it can be stated that NDP_{MP} and NDP_{FC} are widely diverged.

(e) Private Income :

Private income is defined as income of the private sector obtained from any source whether productive or unproductive. Generally, such income is earned from all sources including transfer payments received by private sector. It is important to note that private income always includes net factor income from abroad. Therefore,

Private Income = NDP_{FC} + transfer incomes + net factor income earned from abroad - income from domestic product accruig to public sector.

Private income can be derived from either NDP_{FC} or NNP_{FC} after inclusions and exclusions of some variables. These are called components (constituents) of private income which are -

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(i) For calculating private income, the net factor income should be included with NDP_{FC}.

(ii) The income from domestic product accruing to private sector should be included. But the income from domestic product accruing to public sector should not be included.

(iii) Another important component of private income is considered as transfer incomes. The transfer incomes are the current transfer earning from the government like old age pension, scholarship, unemployment benefit etc.

(iv) For calculating private income, it becomes essential to include the interest on national debt.

These are the elements which should be taken into consider for calculating the private income of the country.

(f) Personal Income :

Personal income is defined as the total income earned by the households of a country before payment of direct taxes. In other words, personal income is the income of the households from all sources factor incomes and transfer incomes of a country. Therefore, income of the firms also belongs to some households. But the entire income is not distributed among all the factors of production.

Personal income can be derived from private income when certain elements are excluded. Generally, while for determining personal income from private income, two important elements are deducted. These two elements are undistributed profit and corporation tax. The undistributed profit is that part of income which is not distributed among all the factors of production. Again corporation tax is the rate of tax which is imposed on the total profit earning of the joint stock companies. Thus,

Personal Income = Private income – undistributed profits – corporation tax

It is important to note that personal income always less than private income. It is because of the fact that undistributed profits is included with private income, but not with personal income.

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Thus it can be stated that personal income and national income are widely diverged to each other. The major differences in between these two concepts can be stated as follows

(i) Personal income is the income of the households from all sources factor incomes. But national income includes only factor incomes which does not include transfer payment.

(ii) Personal income doesnot include undistributed profits. As against it, national income includes undistributed profits.

(iii) Personal income excludes corporation tax. But national income always includes the element of corporation tax.

(iv) Personal income is not the income from domestic product accruing to public sector. Opposite to it, national income is the income from domestic product accruing to public sector.

(g) Disposable Personal Income :

Disposable income or disposable personal income is defined as that income which is earned by the households of a country after payment of direct taxes. In other words, that part of income which is used by the households as consumption expenditure and savings is called disposable personal income. Therefore,

Disposable Personal Income = Personal income – direct taxes

Or,

Disposable Personal Income = Consumption expenditure + savings.

Disposable personal income can be derived from private income after certain modifications. When the amount of undistributed profits and corporation taxes are avoided from private income, then personal income can be obtained. But the amount of direct taxes are included with the personal income. But disposable personal income is that income which is left after payment of direct taxes. Therefore, if direct taxes

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are excluded from private income along with undistributed profits and corporation taxes, disposable personal income can be obtained. It should be noted that disposable income is relatively less than both personal income and private income. It is because undistributed profits and corporation taxes are not included in disposable income and personal income. But in both private and personal income, direct taxes are included. In this way, after expulsions of three elements from private income, disposable income can be found out. This derivation technique can be shown with the help of the following equations.

Disposable personal income = Personal Income – Direct taxes

= Private income – undistributed profits – corporation taxes – direct taxes

Q. 10 Briefly discuss different methods of estimating national income of a country.

Answer :

National income is an uncertain term which is interchangeably used with national output, national expenditure and national dividend. Therefore, the measurement of national income by the authority is an important task. In broader sense, national income of a country can be measured with the help of four important methods. These are briefly discussed as follows

(i) Product Method :

Product method measures national income of a country on the basis of prices and quantities produced in a given period of time. In other words, product method estimates national income of a country on the basis of market value of all final produced goods and services in a year. It should be noted that this method includes the value of net factor income earned from abroad in the form of net exports. The net exports is the difference of the total value of exports and imports in a country during a given period of time. If, Q_1, Q_2, Q_3, ..., Q_n are respectively the quantities produced by a country

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with their respective prices are $P_1, P_2, P_3, \ldots\ldots\ldots, P_n$ then national income according to product method is

$$GNP = P_1.Q_1 + P_2.Q_2 + P_3.Q_3 + \ldots\ldots + P_n.Q_n + (X - M)$$

$$= \sum_{i=1}^{n} P_i.Q_i + (X - M)$$

Where, X is exports and M is imports.

(ii) Income Method :

According to income method, national income is the total income earned by all the factors of production in a country during a given period of time. It includes the income received by the residents of a country for their productive services during a year. Therefore, all the incomes of factors of production in the form of wages, rate of interest, rent and profits are included. This method always includes the value of net exports. Therefore, according to this method national income is given by

$$GNP = (w + r + i + \pi) + (X - M)$$

Where, w is wages, r is rent, i is rate of interest and π is profit.

(iii) Expenditure Method :

According to this method, national income is the aggregate of all the final expenditure on gross domestic product in an economy during a year. This method states that national income is the sum of consumption expenditure (C), investment expenditure (I) and government spending (G). This method explains that national income is become equal to national expenditure of the country in a year. It is mainly because of the fact that income of one person is the result of expenditure of another and vice-versa. According to this method national income is

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

(iv) Value Added Method :

Value added method is considered as the modified form

of product method. In this method, national income is the difference between value of output and value of intermediate inputs. In this method, national income is become equal to the gross value added. Therefore national income is given by

GNP = Value of output – Value of intermediate inputs + (X – M)

In this way, national income of the country can be calculated by using different methods of estimation.

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