Methods of Measuring National Income in India

There are three methods to calculate national income:

1.Product Method

2. Income Method

3. Expenditure Method

Let's discuss these methods one by one in following subsections.

1. Product Method

In this method two approaches-final product approach and value added approach are adopted.

Final Product Approach

It is expressed in terms of GDP. According to final product approach, sum total of market value of all final goods and services produced by all productive units in the domestic economy in an accounting year is estimated by multiplying the gross product with market prices. Being gross it includes depreciation, being at market price, it includes net indirect taxes and being domestic, it includes production by all production units within domestic territory of a country. It includes value of only final goods and services.

Value Added Approach Notes

This method measures contribution of each producing enterprise to production in the domestic territory of a country in an accounting year. According to this method net value added at factor cost by all the producing units during an accounting year within the domestic territory is summed up. This gives us value of net domestic product at factor cost or domestic income.

Steps Involved

1. Identifying all the producing units in the domestic economy and classifying them into the industrial sectors such as primary, secondary, tertiary sector on the basis of similarity of activities.
2. Estimating net value added at factor cost by each producing unit deducting intermediate consumption, depreciation and net indirect taxes from value of output.
3. Estimating net value added of each industrial sector by summing up net value added at FC of all producing units falling in each industrial sector.
4. Computing domestic income by adding up NVA at FC of all industrial sectors.

5. Estimating net factor income from abroad which is added to domestic income for deriving national income.

Imputed rent of owner occupied houses is also included in calculation of national income.

Imputed value of goods and services produced for self consumption are included.

Value of own account production of fixed assets by enterprises, government and the households.

Thus according to value added method,

GNP = (value of output in primary sector - intermediate consumption) + (Value of output in secondary sector - intermediate consumption) + (Value of output in tertiary sector – intermediate consumption) + Net factor income from abroad.

2. Income Method

Income Method measures national income from the side of payments made to the primary factors of production for their productive services in an accounting year. Thus according to income method, national income is calculated by summing up of factor incomes of all the normal residents of a country earned within and outside the country during a period of one year. The income generated is nothing but the net value added at factor cost by factors of production, which is distributed in the form of money income amongst them. Thus, if factor incomes of all the producing units generated within the domestic economy are added up, the resulting total will be domestic income or net domestic product at factor cost (NDPFC). By adding net factor income from abroad to domestic income we get NNPFC. GNP is the addition of all factor incomes generated in production of goods and services. While measuring GDP we must include only those income flows that originate with the production of the goods and services within the particular time period. The components of factor income are: (i) Employees' Compensation, (ii) Profits, (iii) Rent, (iv) Interest, (v) Mixed Income, and (vi) Royalty.

Profit, rent, interest and other mixed income are jointly known as operating surplus. Thus, National Income = compensation of employees + operating surplus.

Steps Involved

1. Identifying enterprises which employ factors of production (labour, capital and entrepreneur).

2. Classifying various types of factor payments like rent, interest, profit and mixed income.

3. Estimating amount of factor payments made by each enterprise.

4. Summing up of all factors payments within domestic territory to get domestic income.

5. Estimating net factor income from abroad which is added to the domestic income to derive national income.

Sale and purchase of second hand goods are excluded.

Imputed rent of owner occupied houses and production for self-consumption are included.

Incomes from illegal activities are not included.

Direct taxes such as Income tax are paid by employees from their salaries are included.

3. Expenditure Method

GDP can be measured by taking into account all final expenditures in the economy. There are three distinct types of expenditures as they are committed by households, firms and Government respectively. These expenditures are classified into following types:

1. Private consumption expenditure (C)
2. Government expenditure (Government purchases of goods and services) (E)
3. Investment expenditure (I)
4. Net exports (X-M)

Thus, GDP = C + I + G + (X - M)

Steps Involved

1. Identification of economic units incurring final expenditure
2. Classification of final expenditure into following components:

(a) Private final consumption expenditure

(b) Government final consumption expenditure

(c) Gross final capital formation

(d) Change in stocks

(e) Net exports.

3. Measurement of final expenditure on the above components.
4. Estimation of net factor income from abroad which is added to NDPFC.

Avoid double counting of goods.

Expenditure on purchase of second hand goods is excluded.

Expenditure on purchase of old share is excluded.

Government expenditure on all transfer payment is excluded.

Problems in Measuring National Income

The problems in measurement of national income are:

National income measures domestic economic performance and not social welfare. For real economic growth, there should be strong positive correlation between the two.

National Income understates social welfare-non-market transactions like home-makers service and do-it-yourself projects are not counted.

National Income does not measure an increase in leisure or work satisfaction or changes in product quality.

National Income does not accurately reflect changes in environment like oil spills cleanup is measured as positive output but increased in pollution is not measured as negative.

Per capital income is a more meaningful measure of living standards than total national income.

There is a problem of double counting. However, problem of double counting could be avoided by utilizing the value added approach.

Problems of depreciation estimation as there are different methods of calculating or estimating depreciation.

Inclusion or exclusion of certain items in national income accounting can cause confusion:

Imputed rent of owner occupied houses is also included in calculation of national income.

Imputed value of goods and services produced for self consumption are included.

Sale and purchase of second hand goods are excluded.

Imputed rent of owner occupied houses and production for self-consumption are included.

Incomes from illegal activities are not included.

Direct taxes such as Income tax are paid by employees from their salaries are included.

Expenditure on purchase of old share is excluded.

Government expenditure on all transfer payment is excluded.

Challenges like difficulties in getting information especially those related to underground economy (illegal activities).