Lesson – 25
National Income and Its Measurement

Summary
In the previous lesson you have learnt about the various concepts relating to national income and their related aggregates. Understanding of these concepts is necessary for measuring national income. In this lesson, you will learn how national income is measured. In lesson No. 24 you have learnt that national income is a flow. This flow can be looked at from three different angles i.e. production, income and expenditure. Hence, there are three different methods of measuring national income. Each one of these methods is explained in details in this lesson.

Methods of Measuring National Income

Value Added Method
National income is the value of final goods and services produced in a country within the domestic territory plus net factor income from rest of the world.

In this method following steps are involved –
Step 1: It includes all the enterprises in an economy which are broadly classified into three industrial sectors according to their activities i.e.

Primary, secondary and tertiary sector.

Primary sector - It includes productive activities like agriculture, forestry, fishing, mining etc.

Secondary sector - It includes sub sectors like construction, manufacturing, electricity, gas and water supply.

Tertiary sector - This is also known as service sector. This sector includes transportation, communication, banking services etc.

Step 2: Net value added of each producing unit of the economy is estimated from their gross value of output which is calculated by multiplying total volume of goods produced with their prices.

Net value added at FC = Gross value of output - IC - Dep - NIT
The sum total of net value added at FC of all the three sectors in the domestic territory of a country gives us Net Domestic Product at Factor Cost.

**Step3**- Net National Product at factor cost is obtained by adding net factor income from ROW to net domestic product at fc or Net Value Added at fc.

\[ \text{NNP at fc} = \text{NVA at fc} + \text{NFIA or net factor income from ROW (Abroad)}. \]

If net factor income from ROW is negative, NDP at FC will be greater than net national product at factor cost (National Income), and if it is positive national income will be greater than NDP at FC.

### Precautions

- Production for self consumption must be included in the estimation of national income.
- The sale of second hand goods should not be included in national income.
- Commission paid to the broker for sale and purchase second hand goods should be include.
- Value of intermediate goods should not be included because it leads to double counting.
- Services of house wife should not be included because it is very difficult to evaluate them.

### Income Method

According to this method, national income is estimated by adding incomes earned by all the factors of production for their factor services during a year.

**It includes the following steps –**

**Step1**- Classify the production units into primary, secondary and tertiary sector. The classification is same as in value added method’

**Step2**- Estimate the following factor incomes paid out by the production units in each industrial sector in the form of compensation of employees, rent, interest, Profits and mixed income.

**Step3**- Take the sum of factor payments by all the industrial sectors to arrive at the net domestic product at factor cost.

\[ \text{Net domestic product at fc} = \text{compensation of employees + rent + interest + Profits + mixed income.} \]

\[ \text{National Income or Net National Product at fc} = \text{Net domestic product at fc + NFIA or net factor income from ROW (Abroad)} \]

### Precautions

- Income from sale of second hand goods should not be included.
- Gifts, donations, charities, taxes, fines, income from lotteries etc., are not included.
• While estimating compensation of employees all benefits accruing to the employees whether in cash or in kind must be included.
• In estimating interest, the interest on only those loans should be included which are taken for production,

**Final Expenditure Method**

Expenditure incurred on final goods is final expenditure. Final goods are those goods which are demanded for final consumption and investment. The demand for final consumption and investment is made by all the four sectors of the economy, namely, households, firms and the government and rest of the world.

**In this method following steps are involved –**

**Step1**- Estimate the following expenditure incurred on the final products of all the sectors of the economy.
- Private final consumption expenditure.
- Government final consumption expenditure.
- Gross Investment
- Net exports (exports - imports)

The sum total of all the above expenditures on final products of all the sectors of the economy gives us gross domestic product at market price.

**Step2**- Deduct consumption of fixed capital (Depreciation) and net indirect taxes from gross domestic product at market price to get net domestic product at factor cost.

\[ \text{NDPFC} = \text{GDPmp} - \text{consumption of fixed capital} - \text{Net indirect tax (indirect taxes - subsidies)} \]

**Step3**- Add net factor income from abroad to the net domestic product at factor cost to obtain net national product at factor cost which is the national income.

\[ \text{National Income or NNPFC} = \text{NDPfc} + \text{net factor income from abroad} \]

**Precautions**

- Expenditure on intermediate products should not he included to avoid the problem of double counting
- Expenditure on gifts, donations, taxes, scholarships etc. should not be included in National Income as these are transfer payments.
- Expenditure incurred on purchase of second hand goods should not be included as the expenditure on these goods has already been included when bought for the first time.
- Expenditure on purchase of bonds and shares should not be included as these are financial transactions

**National Product and Other Aggregates**

Contd.
Income from NDPfc in accruing to private Sector

= NDPfc – Income from property and entrepreneurship accruing to government administration department - savings of non-departmental enterprises.

A. Private income = Income from domestic product accruing to private sector + Net factor income from abroad + national debt interest + current transfers from government + other current transfers from the rest of the world (net).

B. Personal income = private income - saving of private corporate sector (undistributed profit) - corporation tax

C. Personal disposable income = Personal income – direct taxes paid by the households – miscellaneous receipts of the government.

Evaluate Yourself

Q. Mention any four precautions while estimating national income.

Q. Explain steps involved in the estimation of national income by expenditure method.

Q. From the data given below, calculate private income –

( in crores)

i) NDPfc 2,000

ii) Income from property and entrepreneurship accruing to government 100

iii) saving of non-departmental enterprises 20

iv) National debt interest 5

v) Net factor income from abroad (-)10

vi) Net current transfers from government 15

vii) Net current transfers from ROW 25

National Disposable Income (Net and Gross)

- Net national disposable income = NNPmp + Net current transfers from rest of the world.
- Gross National Disposable income = GNP mp + Net current transfers from rest of the world.

Q. Give steps to calculate personal disposable income from NDP at fc.