24

NATIONAL INCOME AND RELATED AGGREGATES

The main objective of an economy is to provide goods and services for the satisfaction of different types of wants of the people. This objective is achieved through production process. During production process, income is generated in the economy.

Most of you must have heard or read about national income. It consists of two words national and income. Each of these words has specific meaning in economics. In this lesson, you will learn about the meaning of income, national income, and some basic concepts of national income. Without knowing these concepts it is very difficult to understand the meaning and the ways of measuring national income.

OBJECTIVES

After completing this lesson, you will be able to:

- make a distinction between factor incomes and non-factor incomes;
- understand the circular flow of income;
- know about basic economic activities;
- make distinction between closed the open economy;
- understand the concepts of stock and flow;
- understand the concept of domestic territory and normal residents of a country;
- distinguish between intermediate products and final products, value of output and value added, gross and net measures of value added;

- explain different types of factor incomes;
- understand the concepts of domestic product and national products;
- explain the concepts of nominal and real GDP; and
- understand the concepts of GDP, NDP, GNP and NNP at market price and factor cost.

24.1 MEANING OF INCOME

In the economy we receive different types of incomes. We receive wages and salaries from our employers. We receive interest on capital for lending money. We also receive gifts and donations from others without giving anything in return. All these incomes can be grouped into two types of incomes.

(A) Factor incomes

(B) Non-factor incomes

(A) Factor incomes

A factor income is the income accruing to a factor of production in return for the services rendered to the production unit. We know that production is result of the joint efforts of the four factors of production. These four factors of production are:

(i) Labour

Labour includes all physical and mental efforts of human beings used for production of goods and services. These physical and mental efforts are inseparable. A worker requires both. Some of the jobs requires more of physical labour than mental labour and some jobs require more mental labour than physical labour.

The remuneration paid to the workers is popularly termed as wages and salaries. In national income accounting, it is termed as compensation of employees.

(ii) Land

By land in economics we mean all that is given to us free by nature, on, below or above the surface of the earth. On the surface it includes, surface area of the soil, water, forests etc. below the surface it includes mineral deposits, water streams, petroleum etc., and above the surface it includes the sun, light, wind etc.

As the land became scarce, sale and purchase of land started.

Those who owned land started charging price for the use of land. Such a payment to the land owner/landlord is termed as rent.

(iii) Capital

Capital includes all the man made resources used for producing goods and services like structures on land, machines, equipments, vehicles, stock of materials etc.

The payment made to the owner of capital for the use of capital is termed as interest.

(iv) Entrepreneurship

It refers to the initiative taken by a person or a group of persons in starting and organising a business. Unless somebody takes this initiative, no business can be started. The one who takes this initiative is termed as entrepreneur.

The income accruing to the entrepreneur is termed as profit.

Thus compensation of employees, rent, interest and profit are factor incomes of the factor owners.

(B) Non- factor incomes:

There are certain money receipts which do not involve any sacrifice on the part of their recipients, the examples are gifts, donation charities, taxes, fines etc. No production activity is involved in getting these incomes. These income are called transfer incomes because such income merely represent transfer of money without any good or service being provided in return for the receipts. These incomes are not included in national income.

24.2 BASIC ECONOMIC ACTIVITIES

Production consumption and investment are three basis economic activities that take place in every economy

(a) Production

Production is addition of value to an existing commodity. During production process already existing commodities are made more useful by combined efforts of factors of production which increase their value. This increase in value is known as production. Suppose, a carpenter purchase wood worth ₹ 1000/- and makes furniture from it sells it for ₹ 2000/- In this production process he has added value of ₹ 1000/- (₹ 2000-1000)

(b) Consumption

Using up of produced goods and services for the direct satisfaction of individual

and collective wants of the people is called consumption. It includes all goods and services purchased by households like food items, clothes shoes etc. and by the government for collective consumption like, roads, bridges, parks, schools etc.

Investment/Capital Formation

Investment is that part of production which is left after consumption and used for creating physical assets like machines, equipments, material etc. It is that part of production which is used for further production. It increases the future production capacity of the economy.

The three activities of production, consumption and investment are interrelated and interdependent. Increase in production, increases both consumption and investment. Increase in consumption induces the producers to produce more in future. Increase in investment increases the future production capacity of a country which increases both production and investment. With out production there can be neither consumption nor investment. These three economic activities are responsible for generating the income flows in the economy.

24.3 CLOSED ECONOMY VS OPEN ECONOMY

In modern age, nearby every country has some economic relations with other countries. All the countries buy goods and services from other countries. Borrowing and lending also takes place among different countries. The people of one country also visit other countries. If the two countries have economic relations with each other, the real and money flows also take place between them.

An open economy is a term used for a country which has economic relations with the rest of the world. Most of the countries of the world are open economies. The closed economy is the term used for a country which has no economic relations with the rest of the world. Such economies are rare in the present day world.

24.4 STOCK AND FLOW

The distinction between stock and flows is very significant for national income estimates.

Stock: A stock is a quantity which is measured at point of time i.e. at 4 p.m. on 31st March etc. wealth, population, money supply etc. are stock concepts. It has no time dimension.

Flow: A flows is a quantity which is measured over a period of time i.e. days, month, years etc. It has time dimension. National income, population growth are flow concepts.

24.5 CIRCULAR FLOW OF INCOME

Production, consumption and investment are important economic activities of an economy. In carrying out these economic activities, people make transactions between different sectors of the economy. Because of these transactions, income and expenditure move in circular form. This is called circular flow of income. It is based on two principles.

(i) The expenditure of the buyer because the income of the sellers.

(ii) Good and services flow in one direction from sellers the buyers while money payment for these goods, and services flow in opposite direction i.e. from buyers to sellers.

In this way, the flow of goods and services (real flow) and flow of money payments (money flow) together make a circular flow.

Real flow

Households render factor services as owners of land, labour, capital and entrepreneurship to firms. The firms produce good, and services to meet the demand of the households. Such flow of factor services from households to firms and flow of goods and services from firms to households is know as real flow.

Money flow

In modern economies, goods and services and factor services are valued is terms of money. Households receive rent for land, wages for labour, interest for capital and profit for entrepreneurship- from firms and make payment for goods and services supplies by firms. This flow of money between firms and households is called money flow:

Circular flow can be shown with the help of a diagram given below:

Circular flow of income in a two sector economy without savings.

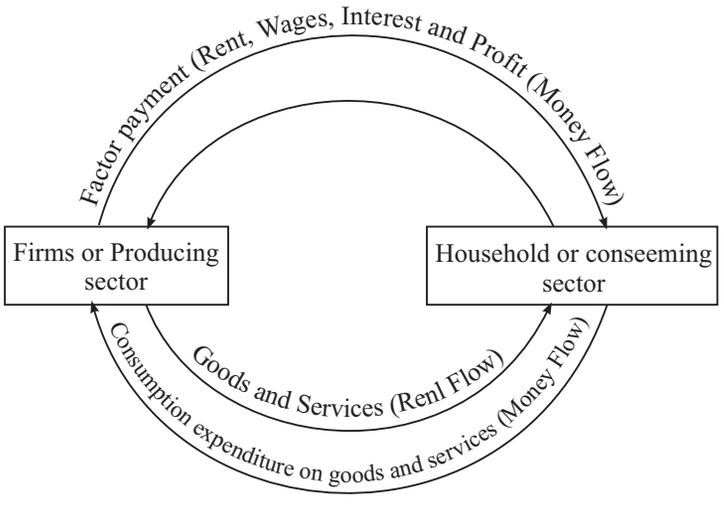

Fig. 24.1

Different sectors of the economy and their inflows and outflows.

An open economy can by divided into following five sectors:

(i) Producing sector

(ii) Household sector

(iii) Government sector

(iv) Financial sector

(v) Rest of the world sector.

The circular flow of income among these sectors can be shown with the help of a chart given below:

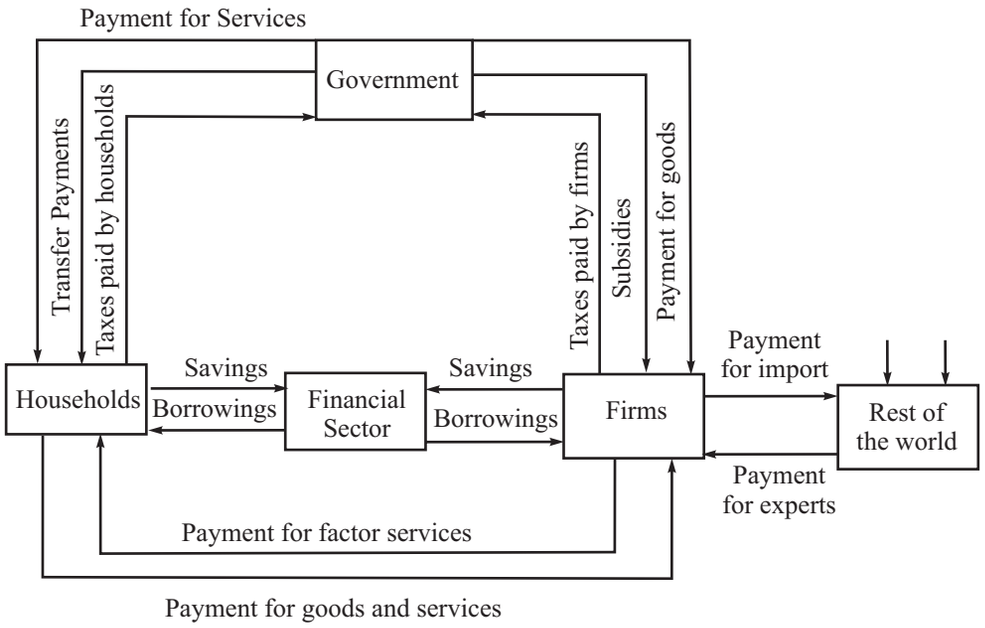

Fig. 24.2

1. Flows from and to the production units

(a) They buy factor services from households (real inflow). In return they make payment in the form of wages, vent, interest and profits (money out flows)

(b) They deposit savings in financial sector (money outflow)

(c) They deposit savings in financial sector (real inflow) and in return make payments for import. (money outflow)

(d) They export goods and services (real outflow) and in return they get payments for the exports (money outflow)

(e) They pay taxes to the government (money outflow)

(f) They sell goods and services to households and government. (real outflow). In return, they get payment from households, (private consumption expenditure) and general government (government consumption expenditure) (money inflow)

(g) They receive subsidies from government. (money inflow)

(h) They borrow from the financial sector (money inflow)

2. Flows from and to the households:

(a) They buy goods and services from the production unit (real inflow) and in return make payments in the form of consumption expenditure (money outflow)

(b) They pay personal taxes to the government (money outflow)

(c) They deposit savings in the financial sector (money outflow)

(d) They sell factor services to the enterprises (real flow) and in return get factor incomes (money inflow)

(e) They get free services (real inflow) and transfer payment (money inflow) from government.

3. Flows from and to government

(a) It purchased goods and services from production units (real inflow) and in return makes payments i.e. government consumption expenditure (money outflow)

(b) It pays subsidies to the production units (money outflow)

(c) It provides free services to households (real outflow) and make transfer payments (money outflow)

(d) It deposits savings in the financial sector (money outflow)

(e) If receives taxes from production units (money inflow)

(f) It receives personal taxes from households (money inflow)

4. Flows from and to the financial sector

(a) It lends capital to the production units (money outflow)

(b) It receives savings from production units, households and government (money inflow)

5. Flows from and to the rest of the world

(a) Goods and services are imported from the rest of the world (real inflow) and in return payment are made (money outflow)

(b) Goods and service are exported to rest of the world (real outflow) and in return payment are received (money inflow)

Not all the flows influence the generation of national income. Some of these are non-factor or transfer incomes flows and have no effect on national income. The significance of the distinction between the two types of flows will become more clear when you will study lesson no. 25.

INTEXT QUESTIONS 24.1

(i) Name four factor of incomes.

(ii) What are transfer payments?

(iii) What is a closed economy?

(iv) Give any two examples each of stock and flow.

24.6 CONCEPTS RELATED TO NATIONAL INCOME

To understand the meaning of national income it is essential to understand some basic concepts related to national income and its related aggregates. These concepts are

24.7 DOMESTIC TERRITORY

The concept of domestic territory (Economic territory) is different from the geographical or political territory of a country. Domestic territory of a country includes the following

(i) Political frontiers of the country including its territorial waters.

(ii) Ships, and aircrafts operated by the normal residents of the country between two or more countries for example, Air India's services between different countries.

(iii) Fishing vessels, oil and natural gas rigs and floating platforms operated by the residents of the country in the international waters or engaged in extraction in areas where the country has exclusive rights of operation.

(iv) Embassies, consulates and military establishments of the country located in other countries, for example, Indian embassy in U.S.A., Japan etc. It excludes all embassies, consulates and military establishments of other countries and offices of international organisations located in India.

Thus, domestic territory may be defined as the political frontiers of the country including its territorial waters, ships, aircrafts, fishing vessels operated by the normal residents of the country, embassies and consulates located abroad etc.

24.8 NORMAL RESIDENT

The term normal resident is different from the term nationals (citizens). A normal resident is a person who ordinarily resides in a country and whose centre of economic interest also lies in that particular country. Normal residents include both nationals (such as Indians living in India) and foreigners (non-nationals living in India). For example, Nepalese living in India for more than one year and performing economic activities of production, consumption and investment in India, will be treated as normal residents of India.

On the contrary, Indian citizens, living abroad (say in USA) for more than one year and performing their basic economic activities there, will be treated as normal resident of that country where they normally reside. They will be considered as non-residents of India (NRIs).

24.9 INTERMEDIATE GOODS AND FINAL GOODS

To understand the concept of national income and its related aggregates it is necessary to understand the meaning and difference between intermediate goods and final goods.

(i) Intermediate Goods : Intermediate goods are those goods which are meant either for reprocessing or for resale. Goods used in the production process during an accounting year are known as intermediate goods. These are non-durable goods and services used by the producers such as raw materials, oil, electricity, coal, fuel etc. and services of hired engineers and technicians etc. Goods which are purchased for resale are also treated as intermediate goods. For example, Rice, wheat, sugar etc. purchased by a retailer/wholeseller.

(ii) Final Goods : Goods which are used either for final consumption by the consumers or for investment by the producers are known as final goods. These goods do not pass through production process and are not used for resale. For example, bread, butter, biscuits etc. used by the consumer.

Whether a good is a final good or an intermediate good depends on its use. For example; milk used by a sweet maker is an intermediate good but when it is used by the consumer it becomes a final good.

Intermediate goods are not included in the calculation of national income. Only final goods are included in the calculation of national income because value of intermediate goods is included in the value of final .goods. If it is included in national income it will lead to the problem of double counting.

24.10 VALUE OF OUTPUT AND VALUE ADDED

(i) Value of Output : Production units use non-factor inputs like raw materials (intermediate goods) and factor inputs (factors of production i.e. land, labour, capital and entrepreneurship) for production. Various firms and production units produce different types of-goods. Money value of all goods and services produced is known as value of output. (It means value of output includes value of intermediate goods also).

Thus;

Value of output = Quantity × Price

Producing units sell their output in the market. However, it is not necessary that the whole of the output produced during an accounting year is sold during that very year. Therefore, the unsold produce forms a part or the stock or inventories. So, change in stock or inventories is also a part of value of output. Thus, value of output can also be measured as

Value of output = Sales + change in stock

It is clear that value of output includes value of intermediate consumption also. National income does not include intermediate consumption expenditure. So for calculation of National Income it must be deducted from value of output to avoid the problem of double counting.

(ii) Value Added : After deducting value of intermediate goods from value of output we get value added. So, value added is the difference between value of output and intermediate consumption expenditure.

Value Added = Value of output - Intermediate Consumption Expenditure

The concept of value of output and Value Added can be explained with the help of an example. Suppose a farmer produces cotton worth ₹ 500 and sells it to the cloth mill. The cloth mill produces cloth worth ₹ 1,500. (Say produces 300 metres of cloth and market price of cloth is ₹ 5 per metre). But in this value, value of cotton is~ also included and cotton used by cloth mill is an intermediate good so value of cotton i.e. ₹ 500 will be intermediate cost. Therefore value added will be ₹ 1000/-

₹ 1500 – ₹ 500 = ₹ 1,000/-

Gross and Net Measure : The concept of 'Gross' and 'Net Measure' is very important for the calculation of national income. The value of output and value added calculated above is a gross measure because when goods are sold out in the market these include all type of costs. During production process fixed capital assets like machines, building etc. get depreciated and their value goes down. This

is known as normal wear and tear of machinery or consumption of fixed capital or depreciation. So every production unit makes provision for depreciation. When it is included in value, of output and value added, these are called Gross Value of output and Gross Value added respectively.

If depreciation is not included in value of output and value added these are called Net Value of output and net value added respectively.

Net Value of output = Gross Value of output – depreciation

Not Value of added = Gross Value of added – Depreciation

24.11 MARKET PRICE AND FACTOR COST

The buyers purchase goods from the market and the price paid by them is known as 'market price': The sellers pay a part of this price as 'indirect taxes' to the Government.

(i) **Indirect taxes** are those taxes which are levied by the government on sales and production and also on imports of the commodities in the form of sales tax, excise duties, custom duties etc. These taxes increase the market price of the commodities.

(ii) **Subsides :** Sometimes, Government gives financial help to the production units for selling their product at lower prices fixed by the government. Such help is given in case of those selected commodities whose production the Government wants to encourage. If we deduct these subsidies from indirect taxes, we get net indirect taxes.

(iii) **Net Indirect Taxes :** It is the difference between indirect tax and subsidy.

Net Indirect Tax = Indirect Tax - Subsidy

Value Added at Market Price - Net Indirect Tax (NIT)

= Value Added at Factor cost (FC)

Or Value Added at MP - Indirect Tax + Subsidy

= Value Added at FC

24.12 DOMESTIC INCOME VS NATIONAL INCOME

The sum total of value added by all production units within domestic territory of a country is called domestic product. Both residents and non-residents render factor services to these units. Therefore, the income generated in these units is shared by both the residents and non-residents as their factor income. To get contribution of only normal residents (or their factor income earned within the

domestic territory) we have to deduct the factor payments made to the non-residents. These factor payments are known as factor payments made to the rest of the world.

The residents, in addition to their factor services to the production units located in the economic territory of a country, also provide factor services to the production units outside the economic territory i.e., to the rest of the world (ROW). In return for these services they receive factor incomes from the rest of the world.

Thus, National income is the sum total of factor incomes earned by the normal residents of a country within and outside the economic territory. Therefore,

National Income = Domestic Income + Factor income received from ROW – Factor payments made to ROW.

Net Factor Income from ROW : It is the difference between factor income 's received from ROW and factor payments made to ROW.

National Income/Product = Domestic Income/product + Net factor income form abroad

Accordingly,

(i) Gross Domestic Product at market price + Net factor income from abroad = Gross National Product at market price.

(ii) Net Domestic Product at market price + Net factor income from abroad = Net National Product at market price.

(iii) Net Domestic Product at Factor cost + Net factor income from abroad = Net National Product at factor cost.

It is Net National Product at factor cost which is called **National Income** of a country.

Nominal and Real GDP

When the money value of goods and services included in GDP is estimated on the prices of current year, it is called GDP at current prices or nominal GDP. Here current prices mean the prices of the year of which GDP is estimated. For example, for estimating GDP for the year 2012-13 if we use the prices prevailing in the year 2012-13, we shall get nominal GDP.

On the other hand, when the value of goods and services included in GDP is estimated on the prices of base year, we get GDP at constant prices or real GDP. Increase in real GDP implies increase in the production of goods and services. Therefore, the calculation of GDP at constant prices or real GDP gives us the correct picture of the economic performance of an economy.

INTEXT QUESTIONS 24.2

Choose the correct alternative

(i) The term 'domestic' territory in national income is associated with:

A. Economic territory

B. Geographical territory

C. Residents

D. Citizens

(ii) By deducting intermediate consumption expenditure and net indirect taxes from the value of output we get

A. Gross value added at market price.

B. Gross value added at factor cost.

C. Net value added at market price.

D. Net value added at factor cost.

(iii) By deducting consumption of fixed capital and intermediate cost from the value of output we get:

A. Gross value added at market price.

B. Gross value added at factor cost.

C. Net value added at market price.

D. Net value added at factor cost.

(iv) Value added is a measure of the contribution of

A. a resident.

B. a production unit.

C. an entrepreneur.

D. a worker.

(v) The expenditure on goods and services purchased for resale by a production unit is

A. Intermediate cost.

B. Value of final products.

C. Value of output.

D. Factor cost.

(vi) National income of a country is same as

A. Gross National Product at market price.

B. Net National product at factor cost.

C. Gross National Product at factor cost.

D. Net National Product at market price.

(vii) The difference between domestic income and national income is of

A. Net indirect taxes

B. Net factor income from abroad

C. Depreciation

D. Intermediate consumption expenditure

24.9 NATIONAL INCOME AS AGGREGATE OF FACTOR INCOMES

A production unit is formed by the four factors of production, land, labour, capital and entrepreneurship. During production process they generate income. This generated income is known as Net Value Added at FC (NVA at FC). Net value added at factor cost is distributed among the owners of four factors of production in the form of following factor incomes.

(a) Compensation of employees

Compensation of employees includes all monetary and non-monetary benefits that accrue to the employees on account of labour services rendered by them in the production process. The employees get wages or salaries. In addition they may get many other benefits as employees like bonus, employer's contribution to provident fund, free accommodation, free conveyance, free medical facilities, free holiday trips, etc.

(b) Rent

It is a factor income earned from lending the services of buildings and subsoil assets for production of goods and services.

(c) Interest

Interest is the income earned by those who provide funds to the production units. Any interest payment against loans given to consumers to meet consumption expenditure is not a factor payment and so can not be treated as factor income.

(d) Profit

Profit is the income accruing to the entrepreneur for his entrepreneurial services (i.e. bearing risks and uncertainties in the business) to the production units. It is a

residual income left after making factor payments out of the value added in the form of compensation of employees, rent and interest.

(e) Mixed Income of self employed

Mixed income of self employed is the income generated by self employed persons like doctors, lawyers, farmers, shop keepers etc. A self employed person provide his labour as well as his property in his work and generally does not keep accounts in a manner so that the factor payments are clearly identified. For example, a small shopkeeper starts his business in his own house employing his own labour and capital. Hence, the income of this small shopkeeper will be termed as mixed income of self employed.

National Income as aggregate of factor incomes

National Income = Compensation of employes + Rent + Interest + profit + Mixed income + Net factor income from ROW.

or National Income = NDP at FC + Net Factor income from ROW.

24.10 NATIONAL INCOME AS AGGREGATE OF FINAL EXPENDITURE

Income generated during production process in the form of factor incomes is spent by the factor owners on final consumption and investment goods. All consumer goods are generally final goods. Durable producer's goods like machines and buildings which are used again and again in the production process are also final goods because they are not further sold.

Demand for final goods are made by all the three sections of the economy, namely households, firms and the government. The purchases for final consumption are made by the households and the government. The purchases for investment are made by the production units within the economic territory. Accordingly, the final expenditure is classified into

(a) Private final consumption expenditure

(b) Government final consumption expenditure

(c) Investment Expenditure

(d) Net exports.

(a) Private Final Consumption Expenditure

Private Final Consumption Expenditure includes purchases by the households and the non-profit institutions serving housholds. The households purchase goods and

services for satisfaction of wants of their family members. The non-profit institutions serving households consist of institutions like mosque, temples, churches, gurudwaras, charitable hospitals, etc. who provide goods and services to the households free of cost.

Final consumption Expenditure includes expenditure made by the households and non profit institutions on the purchase of the following items

(i) Consumer non-durable goods like fruits, vegetables etc. These goods are used up in a single act of consumption.

(ii) Consumer durable goods like washing machines, furniture etc. These goods are used for a longer period of time.

(iii) Consumer services like education facilities, transport facilities, doctor's services etc. All these services are consumed as soon as they are produced.

(b) Government Final Consumption Expenditure (GFCE)

Government Final Consumption Expenditure is the expenditure on the free services provided to the people by the government. The main examples of these services are that of police, military, educational institutions, hospitals, roads, bridges, legislatures and other government departments.

(c) Investment Expenditure

Expenditure incurred by production units on the purchase of physical assets such as machines, building etc. during an accounting year, is known as investment expenditure.

There are five categories of investment (Gross domestics capital formation). These are

(i) **Gross Business fixed investments :** Business fixed investment is the amount spent by the business units on the purchase of new capital assets like plants, machinery, equipments etc. These are durable producers goods that is why we call these expenditures as a fixed investment. If we deduct depreciation from it will be net business fixed investment.

(ii) **Inventory investment or stock investment :** Inventory investment includes net increase in the stock of raw materials, semi finished goods and finished goods with producers,. It is essential for continuous supply of goods and services by the producers.

(iii) **Residential construction investment :** The amount spent on the building of housing units is regarded as residential construction investment in national income accounting.

(iv) Public Investment : It includes all investment by the Government such as expenditure on building roads, hospitals, schools etc.

(v) Net exports: Exports refer to expenditure by foreigners on goods and services produced in our domestic territory whereas, imports refer to our expenditure on foreign Good and services. Net exports are a difference of exports and imports.

INTEXT QUESTIONS 24.3

Choose the correct alternative:

(i) Which of the following is not treated as compensation of employees?

A. Payment of salary.

B. Payment of bonus.

C. Payment of travelling expenses on a business tour.

D. Free accommodation..

(ii) Rent in national income estimates accrues to

A. Land used for production.

B. Structure erected on land used for production.

C. Land and structure both used for production.

D. Land and structure used for residence.

(iii) The GVA at MP exceeds NVA at MP by the amount of

A. Indirect taxes

B. Subsidies

C. Consumption of fixed capital

D. Net factor income from abroad.

(iv) National product exceeds domestic product by the amount of:

A. Exports

B. Factor income received less factor income paid to abroad

C. Factor income received from abroad.

D. Imports

(v) The final expenditure is the expenditure on :

A. Consumption only.

B. Investment only.

C. Both consumption and investment.

D. Neither on consumption nor on investment.

(vi) Domestic product at market price exceeds domestic product at factor cost by:

A. Net factor income from abroad.

B. Consumption of fixed capital.

C. Net indirect taxes.

D. Exports.

24.11 NATIONAL INCOME AND ITS RELATED AGGREGATES

After understanding the related concepts of national income you can easily understand the, meaning of national income and its related aggregates. The related aggregates of national income are

(i) Gross Domestic Product at Market price (GDP_{MP})

(ii) Gross Domestic Product at Factor Cost (GDP_{FC})

(iii) Net Domestic Product at Market Price (NDP_{MP})

(iv) Net Domestic Product at FC or (NDP_{FC})

(v) Net National Product at FC or National Income (NNP_{FC})

(vi) Gross National Product at FC (GNP_{FC})

(vii) Net National. Product at MP (NNP_{MP})

(viii) Gross National Product at MP (GNP_{MP})

(i) Gross Domestic Product at Market Price : It is the money value of all the final goods and services produced within the domestic territory of a country during an accounting year.

GDP_{MP} = Net domestic product at FC (NDP_{FC}) + Depreciation + Net Indirect tax.

(ii) Gross Domestic Product at FC : It is the value of all final goods and services produced within domestic territory of a country which does not include net indirect tax.

$GDP_{FC} = GDP_{MP}$ – Indirect tax + Subsidy

or $GDP_{FC} = GDP_{MP}$ – NIT

(iii) Net Domestic Product at Market Price : It is the money value of all final goods and services produced within domestic territory of a country during an accounting year and does not include depreciation.

$NDP_{MP} = GDP_{MP}$ – Depreciation

(iv) Net Domestic Product at FC : It is the value of all final goods and services which does not include depreciation charges and net indirect tax. Thus it is equal to the sum of all factor incomes (compensation of employees, rent, interest, profit and mixed income of self employed) generated in the domestic territory of the country.

NDP_{FC} = GDP at MP – Depreciation – Indirect tax + Subsidy

(v) Net National Product at FC (National Income) : It is the sum total of factor incomes (compensation of employees + rent + interest + profit) earned by normal residents of a country in an accounting year

or

$NNP_{FC} = NDP_{FC}$ + Factor income earned by normal residents from ROW - factor payments made to ROW.

(vi) Gross National Product at FC = It is the sum total of factor incomes earned by normal residents of a country along with depreciation, during an accounting year.

$GNP_{FC} = NNP_{FC}$ + Depreciation

(vii) Net National Product at MP : It is the sum total of factor incomes earned by the normal residents of a country during an accounting year including net indirect taxes.

NNP MP = NNP_{FC} + Indirect tax – Subsidy

(viii) Gross National Product at MP : It is the sum total of factor incomes earned by normal residents of a country during an accounting year including depreciation and net indirect taxes.

$GNP_{MP} = NNP_{FC}$ + Dep + NIT

INTEXT QUESTIONS 24.4

Fill in the blanks with the help of the clues given below

Net Indirect Taxes, Subsides, Depreciation, Factor incomes earned by normal residents from ROW

(i) $GDP_{MP} = NVA_{FC}$ + Depreciation + ...

(ii) $NDP_{MP} = GDP_{MP}$ – .....

(iii) $NNP_{FC} = NDP_{FC}$ + ... - Factor Payments made to ROW.

(iv) $GDP_{FC} = GDP_{MP}$ - Indirect Taxes + ...

(v) $NDP_{FC} = GDP_{MP}$ - Depreciation - .....

WHAT HAVE YOU LEARNT

- The term 'domestic' in domestic income is associated with 'economic territory'.
- The intermediate goods are those goods which are purchased by production units from other production units and are meant either for resale or for further production. Final goods are those goods which are acquired for final consumption and investment.
- During production process production units generate income known as net value added at factor cost.
- The excess of value of output over intermediate consumption is 'value added'
- Gross concept includes depreciation while net concept does not include it.
- GVA at MP = Value of output - Intermediate Cost.
- Net indirect taxes = Indirect Tax - Subsidy.
- NVA at MP = GVA at MP - Consumption of fixed Capital.
- NVA at FC = NVA at MP - indirect taxes + subsidies.
- The economic territory of a country is different from its geographical territory.
- Sum total of value added by all production units located in economic territory of a country is domestic product.
- Domestic product + net factor income received from abroad is national product.
- Net national product at factor cost is same as national income.
- The concept of resident is different from the concept of citizen.
- The factor incomes are : compensation of employees accruing to labour, rent to land owners, interest to capital owner and profits to entrepreneur. Mixed income is a mixture of factor incomes and it is difficult to allocate it among different factor incomes.

TERMINAL EXERCISE

1. Explain the concept of economic territory.
2. Explain the concept of residents.
3. Differentiate between intermediate products and final products? What is the significance of this distinction?
4. Explain the concept of value added by giving a numerical example.
5. The following information is given:
   (a) Value of output
   (b) Indirect taxes

(c) Intermediate cost

(d) Consumption of fixed capital.

(e) Subsidies.

Derive the following measures of value added on the basis of the above information.

(i) GVA at MP

(ii) GVA at FC

(iii) NVA at MP

(iv) NVA at FC

6. Name different factor incomes and explain briefly their meaning.
7. What is 'mixed income'? Why is there a need for such concept?
8. Name different type of final expenditures. Explain briefly their meaning.
9. Name the related aggregates of national income.
10. Explain the circular flows of income in a two sector economy.
11. Explain the relationship among the three basic economic activities.
12. Distinguish between intermediate goods and final goods
13. What are transfer payments? How do they differ from factor payment?

ANSWERS TO INTEXT QUESTIONS

24.1

(i) Compensation of employees, rent, interest and profit

(ii) Read section 24.1 B

(iii) Read section 24.3

(iv) Read section 24.4

24.2

(i) A (ii) B (iii) C (iv) B (v) A (vi) B (vii) B

24:3

(i) C (ii) C (iii) C (iv) B (v) C (vi) C

24.4

(i) Net Indirect taxes; (ii) Depreciation; (iii) Factor income earned from ROW; (iv) Subsides (v) Net Indirect Taxes.

25

NATIONAL INCOME AND ITS MEASUREMENT

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.. Hence, there are three different methods of measuring national income. Each one of these methods is explained in details in this lesson.

OBJECTIVES

After completing this lesson, you will be able to:

- define national income;
- relate the national income from three different angles;
- identify production units located in the economic territory of a country into different industrial sectors;
- explain the meaning of the primary, secondary and tertiary sectors;
- explain the production method (or value added method) of measuring national income;
- explain the precautions to be taken while measuring national income by production method;
- explain the income distribution method of measuring national income;
- explain the precautions to be taken while measuring national income by income distribution method;

- explain the final expenditure method of measuring national income;
- explain the precautions to be taken while measuring national income by final expenditure method;
- show that all the three methods of measuring national income lead to the same result; and
- calculate private income, personal income, personal disposable income, national disposable income (gross and net).

25.1 METHODS OF MEASURING NATIONAL INCOME

The production units produce goods and services. For this they employ four factors of productions viz, land, labour, Capital and entrepreneurship. These four factors of production jointly produce goods and services i.e. they add value to the existing goods. This value added i.e. net domestic product is distributed among the owners of four factors of production receive rent, compensation of employees, interest and profit for their contribution to the production of goods and services. The incomes received by the owners of the factors of production are spent on the purchase of goods and services from the production units for the purpose of consumption and investment. In short, production generates income. Income is used for expenditure, and expenditure, in turn, leads to further production. There are three phases of circular flow of national income. So there are three methods of measuring national Income. They are

(A) Output or value added method

(B) Income method

(C) Expenditure Method.

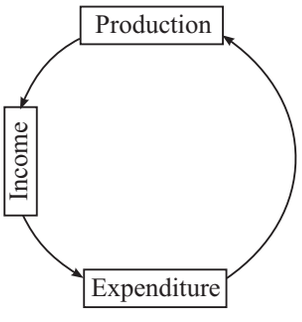

Fig. 25.1: Three phases in the circular flow of national income.

25.2 VALUE ADDED METHOD

With the help of this method national income is estimated at production level. At production level 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:

Firstly, all the producing enterprises in an economy are broadly classified into three industrial sectors according to their activities. These are:

Primary sector: Primary sector consists of those producing units which are carried out by using natural resources. It includes productive activities like agriculture, forestry, fishing mining etc.

Secondary sector: This sector includes those producing units which transform inputs into output for example: transformation of wood into a chair. It includes sub sectors like construction, manufacturing, electricity, gas and water supply.

Tertiary sector: Producing units of this sector produce services of all kinds such as banking, trade, transport etc. This is also known as service sector. This sector includes transportation, communication, banking services etc.

Secondly: Net value added of each producing unit of the economy is estimated from their gross value of out put which is calculated by multiplying total volume of goods produced with their prices. After deducting the sum of value of intermediate goods (IG), depreciation and net indirect taxes (NIT) from value of output we get net value added at FC of the producing units. or

Net value added at FC = Gross value of output - IC - Dep - NIT

By adding up net value added at FC of all the producing units of a sector we get net value added at FC of that particular sector. 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.

Thirdly: Net National Product at factor cost is obtained by adding net factor income from ROW to net domestic product at factor cost.

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.

From value of output to National Income (Production Method Value Added)

Intermediate Consumption				
Consumption of fixed capital	Consumption fixed capital			
Net Indirect taxes (NIT)	NIT	NIT		Net Factor Income from ROW
NVA_{FC} in the Tertiary Sector	NVA_{FC} in the Tertiary Sector	NVA_{FC}, in the Tertiary Sector	NVA_{FC} in the Tertiary Sector	NDP_{FC}=
NVA_{FC} in the Secondary Sector	NVA_{FC} in the Secondary Sector	NVA_{FC} in the Secondary Sector	NVA_{FC} in the Secondary Sector	compensation of employees + Rent + Interest + Profit
NVA_{FC} in the Primary Sector	NVA_{FC} in the Primary Sector	NVA_{FC} in the Primary Sector	NVA_{FC} in the Primary Sector	+ Mixed Inceome
Gross Value of output at MP	GDP at MP	NDP at MP	NDP at FC	NNP at FC (National Income)

Chart 25.2

Numerical Example

1. Calculate Gross value added at factor cost from the following :

(i)	Gross value of output at MP	10,500
(ii)	Depreciation	1000
(iii)	Indirect taxes	750
(iv)	Economic subsidies	200
(v)	Intermediate consumption	4000
(vi)	Compensation of employees	2000

Solution

Gross value added at Factor cost will be calculated as under:

Gross value of output at MP	10,500
+ Economic Subsidies	+200
– Intermediate Consumption	–4000
– Indirect Taxes	–750
	₹ 5950

Precautions

The following precautions are necessary while estimating national income by production method

(i) **Production for self consumption :** That output which is produced for self-consumption and whose value can be estimated, must be included in the estimates of production because it is a part of production of current year.

(ii) **Sale of second hand goods :** The sale of second hand goods should not be included in national income because the value of these goods had already been included earlier.

(iii) Commission paid to the broker for sale and purchase second hand goods should be included because it is payment made for the services provided in the current year.

(iv) Value of intermediate goods should not be included because it leads to double counting.

(v) Services of house wife should not be included because it is very difficult to evaluate them.

INTEXT QUESTIONS 25.1

Fill in the blanks with the help of clues given below Primary sector, secondary sector, Industrial sectors, value of production for self consumption tertiary sector.

(i) Fishing is a part of ..... sector

(ii) The first step of estimating national income with the help of value added method is to identify the different economic activities and classifying them into different ..... according to their activities.

(iii) ..... should be included in the estimation of value of output.

(iv) Transportation is a part of ..... sector.

25.3 INCOME METHOD

Income method is used for measuring national income at distribution level. 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. If includes the following steps:

(i) **Firstly:** Classify the production units into primary, secondary and tertiary sector. The classification is same as in value added method

(ii) **Secondly:** Estimate the following factor incomes paid out by the production units in each industrial sector.

(i) Compensation of employees

(ii) Rent

(iii) Interest

(iv) Profit

(v) Mixed income of self employed

The sum total of the above factor incomes paid out is the same as net value added at factor cost by the industrial sectors.

Thirdly : Take the sum of factor payments by all the industrial sectors to arrive at the net domestic product at factor cost. .

Lastly : Add net factor income from abroad to the net domestic product at factor cost to arrive at net national, product at factor cost.

National Income and Related Aggregates (Income Method)

					Net Indirect taxes
Net Indirect Taxes				Consumption of fixed capital	Consumption of fixed capital
Consumption of fixed capital	Consumption of fixed capital		Net factor in come from ROW	Net factor in come from ROW	Net factor in come from ROW
Profit	Profit	Profit	Profit	Profit	Profit
Interest	Interest	Interest	Interest	Interest	Interest
Rent	Rent	Rent	Rent	Rent	Rent
Mixed income of self employed	mixed income	mixed income	mixed income	mixed income	mixed income
Compensation of employees	Compensation of employees	Compensation of employees	Compensation of employees	Compensation of employees	Compensation of employees
GDP at MP	GDP at FC	NDP at FC	NNP at FC (National Income)	GNP at FC	GNP at MP

Chart 25.3

Numerical Example

1. Calculate national income from the following data:

		(₹ Crores)
(i)	Consumption of fixed capital	50
(ii)	Employers contribution to social security	75
(iii)	Interest	160
(iv)	Net Indirect Taxes	55
(v)	Rent	130
(vi)	Dividends	45
(vii)	Corporate Tax	15
(viii)	Undistributed profit	10
(ix)	Net factor income from abroad	–10
(x)	Wages and salaries	450

Solution

NDPfc = (X) + (ii) + (iii) + (v) + (vi) + (vii) + (viii)

= 450 + 75* + 160 + 130 + 45 + 15 + 10 = 885 Cr.

NNP at fc = NDPfc + (ix)

= 885 + (-10) = 875 Cr.

Notes of solution

- Since wages and salaries and employer contribution to social security are given separately, these must be added to obtain compensation to employees.
- Dividend, undistributed profit and corporate taxes are to be added to get Total profit/Retained Earnings.
- Net indirect taxes, is not required in this question. Similarly consumption of fixed capital is also not required in this question.

Precautions

The following are some of the main precautions which must be taken while estimating national income by the income distribution method

(a) While estimating compensation of employees all benefits accruing to the employees whether in cash or in kind must be included.

(b) In estimating interest, the interest on only those loans should be included which are taken for production, The interest on loans taken to meet consumption expenditure is not included in national income as it is treated as transfer payment.

(c) Gifts, donations, charities, taxes, fines, income from lotteries etc., are not factor incomes but transfer incomes. These should not be included in estimating national income.

(d) Income from sale of second hand goods should not be included as it is not the income received from the goods produced in the current year.

INTEXT QUESTIONS 25.2

Which of the following are included in National Income and why as per Income Method.

(a) The Income of dertist.

(b) Rent Recieved on two Bed room Apartment.

(c) The Service of painter painting his own room

(d) The monthly pocket money received by student from his father.

25.4 FINAL EXPENDITURE METHOD

National income can also be measured at disposition phase with the help of expenditure method. It estimates national income by measuring final expenditure on gross domestic product at market price.

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.

The main steps involved in measuring national income by this method are:

Firstly: Estimate the following expenditure incurred on the final products of all the sectors of the economy.

(i) Private final consumption expenditure.

(ii) Government final consumption expenditure.

(iii) Gross Investment

(iv) 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.

Secondly: 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.

NDPFC = GDPmp - consumption of fixed capital - Net indirect tax (indirect taxes - subsidies)

Thirdly: 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.

NNPFC = NDPfc + net factor income from abroad

(National Income)

National Income (Expenditure Method)

Gross Investment	(-) Depreciation		
Private Final consumption expenditure		(-) Net Indirect Tax	+ Net Factor Income from Abroad
Govt. Final consumption expenditure			
Net Exports (Exports - Imports)			
GDP_{MP}	NDP_{MP}	NDP_{FC}	$NNP_{F}C$ (National Income)

Chart 25.4

Numerical Example

Calculate national income from the data given below by expenditure method.

	Item	₹ (In crores)
(i)	Personal consumption expenditure	3500
(ii)	Consumption of fixed capital	50
(iii)	Net fixed capital formation	1250
(iv)	Change in stock 500 (v) Exports	400
(vi)	Imports 750 (vii) Net indirect taxes	40
(viii)	Governments' consumption expenditure	1600
(ix)	Net factor income from abroad	(-) 10
(x)	Wages and salaries	450

Solution

	₹ (In crores)
Personal Consumption expenditure	3500
+ Net fixed Capital Formation	1250
+ Change in Stock	500
+ Govt. Consumption Expenditure	1600
+ Net Exports (Exports-Imports)	-350
Net Domestic product at market price	**6500**
(-) Net Indirect Taxes	40
Net Domestic product at Factor Cost	**640**
+ Net factor Income from abroad	(-) 10
NNP FC (National Income)	**6450**

Please Note

1. Since Net Fixed Capital Formation is given, we are asked to calculate net National Product at factor cost. Thus, consumption of fixed capital is not required here.
2. Since, fixed capital is given, we need to add change in stock to get the total domestic capital formation (Investment)
3. The entry wages and salaries are not required here.

Precautions

The main precautions required to be taken in estimating national income by expenditure method are:

(i) Expenditure on intermediate products should not he included to avoid the problem of double counting.

(ii) Expenditure on gifts, donations, taxes, scholarships etc. should not be included in National Income as these are transfer payments.

(iii) 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.

(iv) Expenditure on purchase of bonds and shares should not be included as these are financial transactions.

INTEXT QUESTIONS 25.3

Which of the following are included in GDPmp and why as per Expenditure Method.

(a) A purchase of a share.

(b) Construction of a room in existing building.

(c) Purchase of machinery.

(d) Money received by student who has sold his book back to book seller.

25.5 RECONCILIATION OF THE THREE METHODS

The three methods are summarized in the following table:

Value Added Method	Income Distribution Method	Final Expenditure Method
Sum of GVAmp, of all industrial sectors	Compensation of employees + Rent + Interest + Profit + Mixed Income + Consumption of fixed capital + Indirect Tax – Subsidy	Private final consumption expenditure. + Government final consumption expenditure + Gross domestic capital formation (Gross Investment) + Net exports
= GDP_{MP}	GDP_{MP}	= GDP_{MP}
– consumption of fixed capital	– Consumption of fixed capital	– consumption of fixed capital
– indirect taxes	– Indirect tax	– indirect taxes
+ subsidies	+ Subsides	+ subsidies
+ Net factor income from abroad	+ Net factor income from abroad	+ Net factor income from abroad
= NNPfc	= NNPfc	= NNPfc

Chart 25.5

INTEXT QUESTIONS 25.4

Fill in the blanks:

Tertiary, compensation, transfer, investment, consumption

(i) Gifts, donations taxes etc. are ..... payments.

(ii) Interest payment on loans taken to meet ..... expenditure is not treated as factor income.

(iii) Benefits in kind received by the employees is a part of the ..... of employees.

(iv) The expenditure on purchasing furniture by a production unit is a part of .....

(v) Employing of domestic servant is a part of ..... sector.

25.6 NATIONAL PRODUCT AND OTHER AGGREGATES

We have already studied that the sum of net value added by all the production units in the domestic territory is net domestic product of factor cost (NDP_{fc}). All the income generated in a year is not received by consumer households. Income from property and entrepreneurship accruing to the departmental commercial enterprise of the government is retained by the government. Secondly non-departmental enterprises of the government save a part of their profits for future expansion. This sum also is not available for distribution. It these two sums are deducted from NDP_{fe}, we get income from domestic product or NDP_{fc} accruing to private sector.

Income from domestic product accruing to private sector = NDPfe – income from property and entrepreneurship accruing to government administration department savings of non-departmental enterprises.

(i) Private income: Private income consists of factor incomes earned within the domestic territory and abroad by private enterprises and workers (factor owners in the private sector) and current transfer from government and the rest of the world.

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)

(ii) Personal income : Personal income is defined as the current income of persons or households from all sources. We have to deduct undistributed profit and corporate tax payable by the enterprise from private income to arrive at personal income

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

(iii) Personal disposable income: The household cannot spend the entire personal inome. Government takes away a part of it by way of inome tax and other miscellaneous taxes such as education tax, fire tax, sanitation tax. These taxes have to be deducted from personal income to arrive at personal disposable income.

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

Personal disposable inome is the inome available to persons from all sources to dispose of as they choose.

27.7 NATIONAL DISPOSABLE INOME (NET AND GROSS)

National disposable income refers to the inome which is available to the whole country for disposal. It includes both earned inome and transfer income (unearned income)

Net national disposable inome = NNP_{mp} + Net current transfers from rest of the world.

or NNP_{fc} + NIT + Net current transfer from rest of the world

Gross National Disposable income = GNP_{mp} + Net current transfers from rest of the world.

Numerical examples on calculator of national income and other related aggregates

Example 1: 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

Soution:

Income from domestic product accruing to private sector

= NDPfc – (ii) – (iii)

= 2000 – 100 – 20

= ₹ 1880 Crores

Private income = Income from domestic product accruing to private sector

+ (iv) + (v) + (vi) + (vii)

= 1880 + 5 + (-)10 + 15 + 25

= ₹ 1915 crores

Example 2: Calculate (a) personal income (b) Personal disposable income

		₹ in crore
(i)	Private income	1915
(ii)	Income from domestic product accruing to private sector	1880
(iii)	Net factor income from abroad	(-) 10
(iv)	Corporation tax	25
(v)	Savings of private corporate sector	15
(vi)	Direct taxes paid by households	25
(vii)	Other miscellaneous receipts of government administrave departments	5

Soution:

(a) Personal income = Private income – (iv) – (v)

= 1915 – 25 – 15

= ₹ 1875 crores

(b) Personal disposable income

= personal income – (vi) – (vii)

= 1875 – 25 – 5

= ₹ 1845 crores

Example 3: Calculate (a) Gross National disposable inocme (b) Net National disposable income

		₹ in crore
(i)	NNP_{fc}	3,000
(ii)	Net current transfers from government	20
(iii)	Net current transfers from Row	25
(iv)	Net indriect taxes	50
(v)	Depreciation	40

Soution:

(a) Gross National Disposable income

= GNPmp + Net current transfers from Row

= [(i) + (v) + (iv)] + (iii)

= 3000 + 40 + 50 + 25

= ₹ 3115 crores

(b) Net national disposable income

= NNP_{mp} + Net current transfers from ROW

= [(i) + (iv)] + (iii)

= 3000 + 50 + 25

= ₹ 3075 crores

WHAT YOU HAVE LEARNT

- There are three phases of circular flow of national income. Accordingly there are three methods of measurement of national income: value added or production method, income distribution method and final expenditure method.
- The first step in the measurement of national income of a country is to classify its production units into different industrial sectors. The primary sector includes all units engaged in exploiting natural resources. The secondary sector transforms one good into another good. The production units in the services sector produce services.

- The main steps in the value added method are: estimate NVAfc by all sectors and add them to arrive at NDP_{FC}. Add net factor income from abroad to NDP_{FC} to obtain NNP_{FC}.
- The main steps in the income distribution method are: estimate factor incomes paid out by each sector; take the sum of these incomes paid out by all the sectors to get, NDP_{FC}; add net factor income from abroad to get NNP_{FC}.
- The main steps in the final expenditure method are: estimate the sum of final expenditure on consumption and investment to get GDP_{MF}, deduct consumption of fixed capital and indirect taxes and add subsidies to GDPmp to arrive at NDP_{FC} and add net factor income from abroad to NDPfc to get NNPFC.

TERMINAL EXERCISE

1. Explain the three phases of circular flow of national income.
2. Explain the nature of functions of primary, secondary and tertiary sectors.
3. Explain the steps taken in measuring national income through the value added method.
4. What are the main precautions required to be taken in estimating national income by the value added method?
5. Explain the steps involved in estimating national income through the income distribution method.
6. What are the main precautions required to be taken in estimating national income by the income distribution method?
7. What are the main steps in the expenditure method of estimating national income?
8. Point out some of the precautions taken in estimating national income through the final expenditure method.
9. From the following data, estimate the net value added at factor cost and show that it is equal to the sum of factor incomes :

(i)	Sales	9600
(ii)	Increase in stock	2080
(iii)	Intermediate Consumption	2370
(iv)	Depreciation	450
(v)	Wages and salaries	5400
(vi)	Internet	250
(vii)	Rent	750
(viii)	Profit	2150
(ix)	Net indirect Taxes	310

10. Find out "Net value added at factor cost by an enterprise from the following data:

		₹ In crores
(i)	Consumption of Fixed Capital	10
(ii)	Subsidies	5
(iii)	Indirect Taxes	25
(iv)	Purchase of material and Services from other production units	75
(v)	Value of output	125

(Ans. = 70 Corers)

11. Calculate value added by Firm A & B from the following data:

		₹ (Lakh)
(i)	Purchase by Firms B from Firm A	40
(ii)	Sales by Firm B	80
(iii)	imports by Firm. B	10
(iv)	Rent Paid by Finn B	05
(v)	Opening stock of Firm B	15
(vi)	Closing stock of Firm B	20
(vii)	Purchases by Firm A from Firm B	20
(viii)	Closing stock of Firm A	20
(ix)	Opening stock of Firm A	10

12. From the data given below, calculate
    (a) National income
    (b) Private income
    (c) Personal income
    (d) Personal disposable income
    (e) Gross National disposable income

		₹ (in crores)
(i)	Compensation of employees	1000
(ii)	Mixedx income of self employed	2500
(iii)	Depreciation	50
(iv)	Net factor income from abroad	20
(v)	Rent	200
(vi)	Interest	100

(vii)	Profit	500
(viii)	Net Indirect taxes	300
(ix)	National debt interest	70
(x)	Current transfers from governmment	60
(xi)	Net current transfers from ROW	70
(xii)	Corporation tax	30
(xiii)	Savings of private corporate sector	20
(xiv)	Direct taxes paid by households	15

ANSWERS TO INTEXT QUESTIONS

25.1

(i) Primary sector (ii) Industrial sectors (iii) Production for self consumption (iv) tertiary

25.2

(a) Included, as it is payment for final service/factor payment.

(b) Included, as it is payment for final service used by the tenant.

(c) Excluded, as it is not a market transaction.

(d) Excluded, as it is a transfer payment (unilateral payment or unearned income).

25.3

(a) Excluded, as it is mere transfer of ownership from one person to another.

(b) Included, as it is a part of gross Investment.

(c) Included, as it is a part of gross Invesmtment.

(d) Excluded, as it is second hand transaction and value had already been counted at the time of its production.

25.4

(i) Transfer (ii) consumption (iii) compensation (iv) investment (v) tertiary