

INTRODUCTION

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1.0 OBJECTIVES

- To understand the meaning, subject matter, uses and limitations of Microeconomics and Macroeconomics
- To study the meaning of Circular flow of income
- To study the circular flow of income and expenditure in a two sector model economy
- To study circular flow of money with saving and investment in a two sector economy
- To understand circular flow of income in three sector economy
- To understand circular flow of income in a four sector economy
- To understand the importance of circular flow of income
- To study the concepts of GNP, GDP, NNP and NDP
- To understand the meaning of personal income and disposable income
- To study different methods of measurement of national income

1.1 INTRODUCTION

Macroeconomics study examine the economy as a whole i.e. it is a study of aggregates. To study the income and expenditure of the country macroeconomics provides several tools. Therefore study of these tools used to explain national income and expenditure and how to measure it becomes inevitable.

1.2 DISTINCTION BETWEEN MICROECONOMICS AND MACROECONOMICS

1.2.1 Meaning :-

Macroeconomics is concerned with the nature, relationships and behaviour of such aggregate quantities and averages as national income, total consumption, savings and investment, total employment, general price level, aggregate expenditure and aggregate supply of goods and services. As macroeconomics deals with aggregate quantities of the economy as a whole, it is also called as aggregative economics.

1.2.2 Subject matter :-

Theories of National Income, consumption, saving and investment, theory of employment, theories of economic growth, business cycles and stabilization policies, theories of money supply and demand and theory of foreign trade broadly constitute the subject matter of macroeconomics. Macroeconomic theories seek to answer questions such as how is the level of National Income of a country determined? What determines the levels

of overall economic activities in a country? What determines the level of total employment? How is the general level of price determined? etc.

1.2.3 Uses :-

The main justification for macroeconomics lies in the need for generalising the behaviour of and relationships between economic aggregates. To study the system as a whole and to explain the behaviour of aggregate quantities and the relationship between them is extremely difficult. Macroeconomic approach has made it possible. It ignores the details pertaining to the individual economic agents and quantities and compresses the unmanageable economic facts to a manageable size and makes them capable of interpretation. Macroeconomic theories are used in formulating public policies. They provide clarity to the macroeconomic concepts and quantities and bring out the relationship between macro variables of the economy in the form of models or equations.

1.2.4 Limitations :-

Study of macroeconomics is limited to only aggregates. It cannot be applied to explain the behaviour of individual components of the economic system and the individual quantities. Secondly, it ignores the structural changes in constituent elements of the aggregate. Hence conclusions drawn from the analysis of aggregates may involve error of judgement and may be misleading.

1.3 MEANING OF CIRCULAR FLOW OF INCOME

The circular flow of money refers to the process whereby money payments and receipts of an economy flow in a circular manner continuously over a period of time. The various components of money payments and receipts are saving, investment, taxation, loans, government purchases, exports, imports, etc. These are shown in diagram in the form of current and cross-current in such a manner that the total money payments equals the total money receipts in the economy.

1.4 CIRCULAR FLOW OF INCOME

The modern economy is a monetary economy, where money is used in the process of exchange. The modern economy performs economic activities such as production, exchange, consumption and investment. In order to carry out these economic activities people are involved in buying and selling of goods and services. The transactions take place between different sectors of the economy. The process of production and exchange generates two kinds of flows.

1. Product or real flow, that is the flow of goods and services, and
2. Money flow.

Product and money flow in opposite direction in a circular way. The product flow consists of a) factor flow, that is flow of factor services and b) goods flow that is flow of goods and services. In a monetized economy the flow of factor services generates money flows in the form of factor payments which take the form of money flows. The factor payments and expenditure on consumer goods and services take the form of expenditure flow. Expenditure flow is in the form of money flow. Both income and expenditure flow in a circular manner in opposite direction. The entire economic system can therefore be viewed as circular flows of income and expenditure. The magnitude of these flows determines the size of national income. We can explain how these flows are generated and how they make the system work.

The economists, however use simplified models to explain the circular flow of income and expenditure dividing the economy into four sectors namely, I) Household sector, II) Business or Firms sector, III) Government sector, and IV) Foreign sector. These sectors are combined to make the following three models for the purpose of showing the circular flow of income.

- I) Two- sector model including the household and business sectors;
- II) Three- sector model including the household, business and government sectors; and
- III) Four- sector model including the household, business, government and the foreign sectors.

1.5 CIRCULAR FLOW OF INCOME AND EXPENDITURE IN A TWO – SECTOR ECONOMY MODEL

We begin with a simple hypothetical economy where there are only two – sectors, the household and business firms which represent a closed economy and there is no government and no foreign trade. The household sector owns all the factors of production that is land, labour, capital and enterprise. This sector receives income in the form of rent, wages, interest and profit, by selling the services of these factors to the business sector. The business sector consists of producers who produce goods and sell them to the household sector. The household sector consists of consumers who buy goods produced by the business sector.

Thus in the first instance, money flows in the form of such income payments as rent, wages, interest and profits from the business sector to the household sector when the former buys the services of the factors of production to produce goods. Money so received is, in turn, spent by the household sector to buy goods produced by the business sector. In this way money flows in a circular manner from the business sector to the household sector and from the household sector to the business sector in the economy.

The circular flow in a two sector economy is depicted in Fig. 1.1 where the flow of money as income payments from the business sector to the household sector is shown in the form of an arrow in the upper portion of the diagram. On the other hand, the flow of money as consumption expenditure on the purchase of goods and services by the household sector is shown to go to the business sector by an arrow in the lower portion of the diagram. As long as income payments by the business sector for factor services are returned by the household sector to purchase goods, the circular flow of income payments and consumption expenditure tends to continue indefinitely. Production equals sales or supply equals demand, and the economy will continue to operate at this level in a circular flow of money.

Factors of Production- Land, Labour, Capital & Enterprise

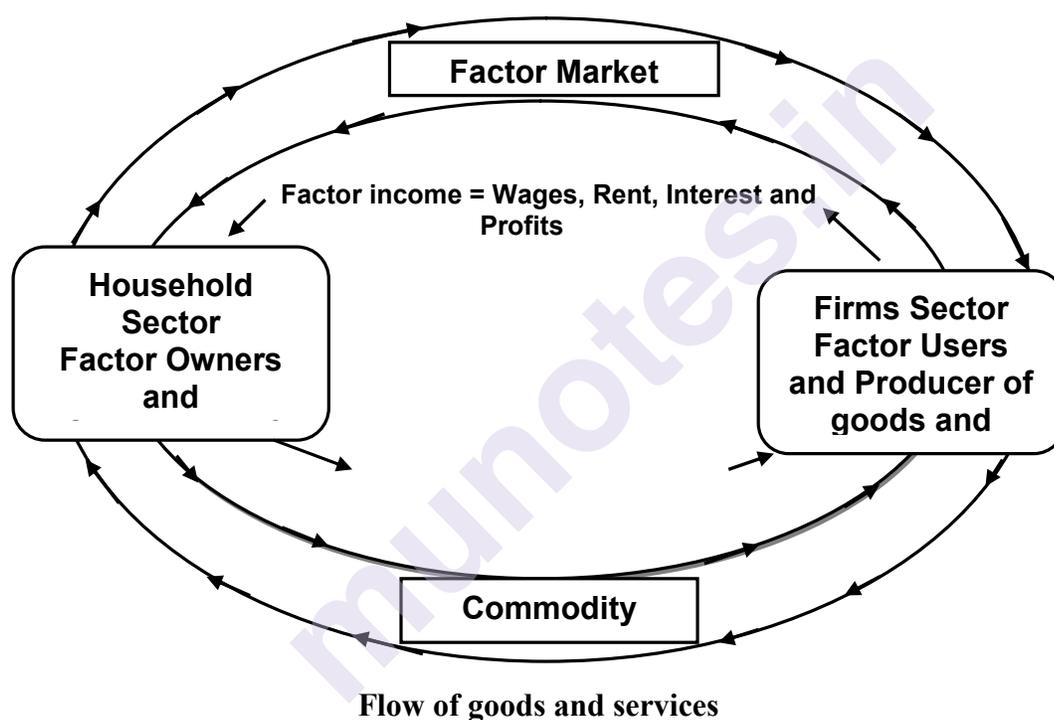


Fig. 1.1

The above analysis of circular flow of income and expenditure in a two – sector closed economy is based on following assumptions.

1. The economy consist of two sectors namely household and business or firms;
2. Household sector spends their entire income received in the form of rent, wages, interest and profits from the business sector on buying of goods and services produced by the firms. They do not hold or save any part of their income.

3. The business firms keep their production exactly equal to their sales or as much as demanded by the households. There are no changes in their inventories.
4. The business sector does not keep any undistributed money as reserve. The money it receives by selling goods and services to the household sector is fully spent in making payments as rent, wages, interest and profits to the household sector.
5. There are no government operations.
6. There is no inflow or outflow of income or no foreign trade.

It is these assumptions that keep the flow of money to move in a circular manner in the economy. But these assumptions are unrealistic and do not fit in the actual working of the economy.

1.6 CIRCULAR FLOW OF MONEY IN A TWO SECTOR ECONOMY WITH SAVINGS AND INVESTMENT

In the analysis of circular flow of income in a two sector economy, we have assumed that, all money income received by the households is spending on consumer goods and services. But in reality, the households do not spend their entire money income on goods and services. They save a part of their income for various purposes. Let us now explain if households save a part of their income, how their savings will affect money flow in the economy.

When households save, their expenditure on goods and services will decline to that extent and as a result money flow to business firms will contract. With reduced money income firms will hire fewer workers or reduce payments to the factors of production. This will lead to the fall in total income of the households. Thus, savings reduce the flow of money expenditure to business firms and cause a fall in economy's total income. Economists, therefore call savings a leakage from the money expenditure flow.

But savings by households will not reduce aggregate expenditure and income, if their savings are brought back into the flow of expenditure. In free market economies financial market consists of commercial banks, stock market and non-bank financial institutions etc. plays an important role of mobilization of savings, where households deposit their savings. On the other hand, business firms borrow money from the financial market for the purpose of investment. Thus, through the financial market savings and investment are again brought into the expenditure stream and as a result total flow of spending does not decrease. Circular flow of money with savings and investment is explained with the help of following assumptions.

1. All the households need to deposit their savings with the financial institutions\ market.
2. There are no inter-households borrowings.

In the following figure, in the middle of the circle a box represents financial market. Money flow of savings is shown from households towards the financial market. Then the flow of investment expenditure is shown as borrowing by business firms from the financial market.

The circular flow of money with savings and investment is shown in the following fig. 1.2.

Factors of production- Land, Labour, Capital & Entrepreneurship

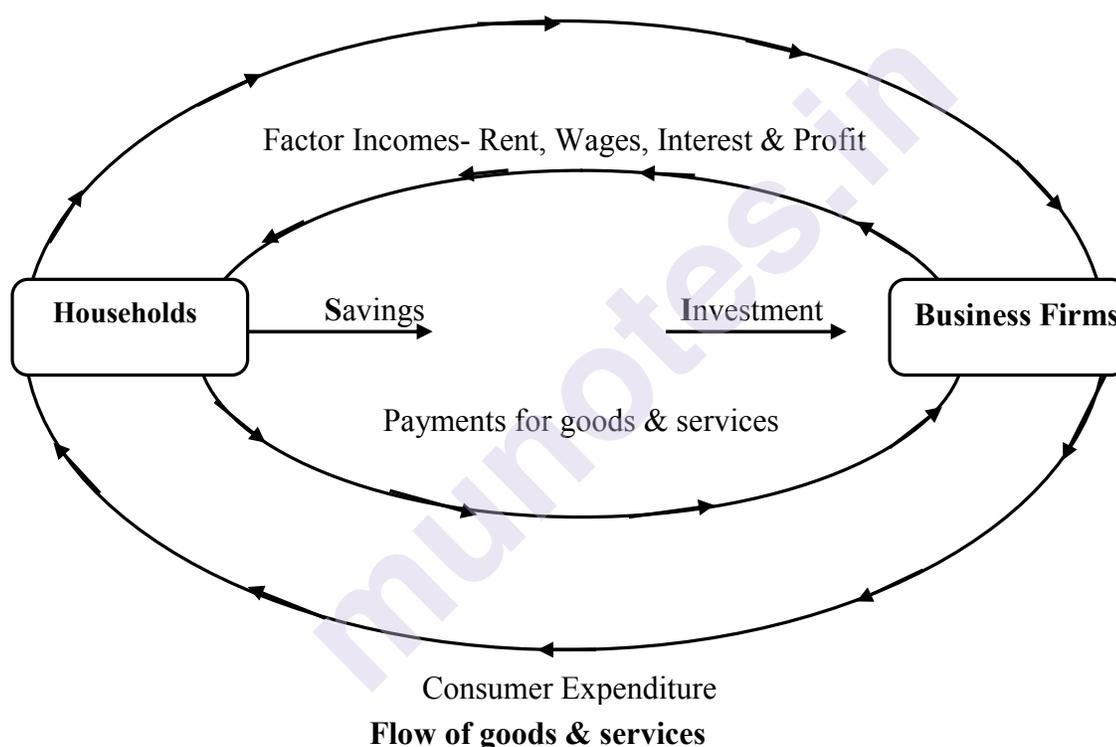


Fig.1.2

The necessary condition for the constant flow of income is savings must be equal to investment. As mentioned above, saving a part of income is not spent on consumer goods and services. In other words, saving is *withdrawal* of some money from the income flow. On the other hand, investment means some money is spent on buying new capital goods to expand production capacity. In other words, investment is *injection* of some money in circular flow of income. But savings and investments in an economy need not necessarily be equal.

If planned savings is more than planned investment expenditure, income, output and employment will fall and therefore, flow of money will decline. On the contrary, if planned investment expenditure is more than

planned savings, income, output and employment will rise and therefore, flow of money will increase. Thus, the economy will be in equilibrium if planned savings is equal to planned investment expenditure.

It is clear from the above analysis that, the flow of money will continue at a constant level only when the condition of equality between planned savings and planned investment is satisfied.

1.7 CIRCULAR FLOW OF INCOME IN A THREE SECTOR ECONOMY

The two sector economy model consists of households and business firms. But in a three sector economy additional sector is government sector. Government affects the economy in many ways. Here we will concentrate on its taxing, spending and borrowing roles. In the modern economy government plays variety of role. Government performs different functions. For this it requires huge amount of income. Government receives income in the form of taxes from households and business firms. Taxes are paid by the households and business firms which not only reduces their disposable income but also their expenditure and savings.

Governments' spending includes expenditure on goods and services, pension payments, unemployment allowance etc. Money spent by Government is an injection of income into the economy which further received by the households and business firms.

Another important method of financing Government expenditure is borrowing from financial market. This is represented by money flow from the financial market to the Government is labelled as Government borrowing.

In a three sector economy we have the following three economic agents.

1. Households and business firms
2. Financial sector
3. Government

The circular flow of income in a three sector economy is shown in the following fig. 1.3.

Wages, Salaries & Payments Purchase of goods & services

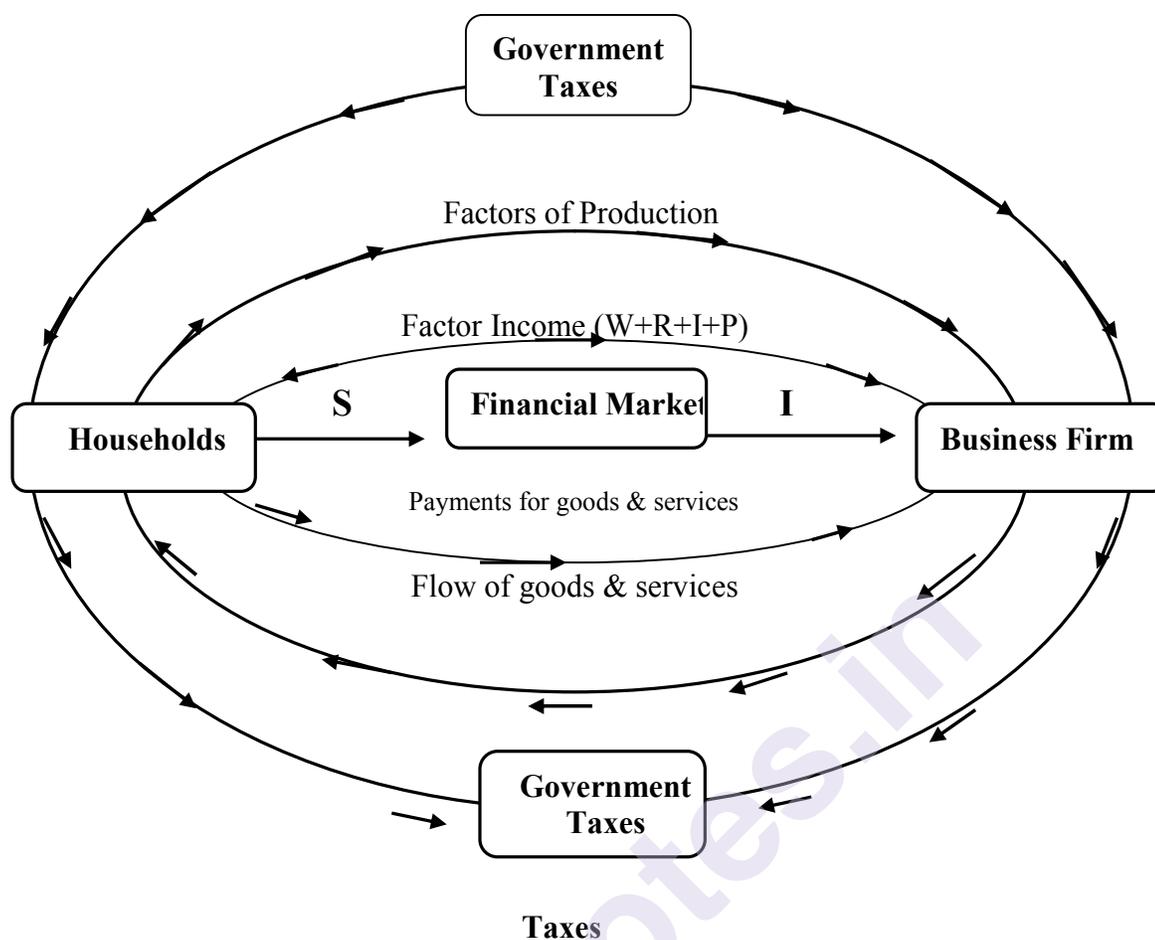


Fig. 1.3

The above figure clearly shows that, income received by the Government in the form of taxes from households and business firms is used for spending in the form of wages, salaries, allowances, pension, subsidies and purchases of goods and services from them. Money spent by the Government is received by the households and business firms.

Thus, the *leakages (withdrawal)* in the form of savings and taxes arise in the circular flow of income. The savings and taxes are further get *injected* back into the circular flow of income in the form of investment and Government spending. When these *leakages (withdrawal)* are equal to *injections* in the form of investment and Government spending the flow of money in the economy operates smoothly.

The inclusion of the Government sector significantly affects the overall economic situation. Total expenditure flow in the economy is the sum of consumption expenditure (C), investment expenditure (I), and Government expenditure (G).

Thus, it is symbolically expressed as,

$$\text{Total expenditure (E)} = C + I + G$$

Total income (Y) received is allocated to consumption (C), savings (S) and taxes (T).

Thus, symbolically expressed as,

$$Y = C + S + T$$

Since expenditure (E) made must be equal to the income received (Y) from equation above we have

$$C + I + G = C + S + T$$

Since C occurs on both sides of the equation and will therefore be cancelled out, we have

$$I + G = S + T$$

By rearranging we obtain

$$G - T = S - I$$

This equation is very significant because it shows what would be the consequences if Government budget is not balanced. If Government expenditure (G) is greater than the tax (T), the Government will have a budget deficit. To finance the budget deficit, the Government will borrow from the financial market. For this purpose, then private investment by business firms must be less than the savings of the households. Thus Government borrowing reduces private investment in the economy.

1.8 CIRCULAR FLOW OF MONEY WITH THE FOREIGN SECTOR OR CIRCULAR FLOW OF MONEY IN FOUR SECTOR OPEN ECONOMY

So far the circular flow of money has been shown in the case of a closed economy. But the actual economy is an open one where foreign trade plays an important role. Exports are an *injection* or inflows into the circular flow of money. They create incomes for the domestic firms. When foreigners buy goods and services produced by domestic firms, they are exports in the circular flow of money. On the other hand, imports are *leakages* from the circular flow of money. They are expenditure incurred by the household sector to purchase goods and services from foreign countries. These exports and imports in the circular flow are shown in fig. 1.4.

Take the inflows and outflows of the household, business and government sectors in relation to the foreign sector. The household sector buys goods imported from abroad and makes payments for them which is a leakage from the circular flow of money. The householders may receive transfer payments from the foreign sector for the services rendered by them in foreign countries.

On the other hand, the business sector exports goods to foreign countries and its receipts are an injection in the circular flow of money. Similarly, there are many services rendered by the business firms to foreign countries such as shipping, insurance, banking etc. for which they receive payments from abroad. They also receive royalties, interest, dividends, profits, etc. for investment made in foreign countries. On the other hand, the business sector makes payments to the foreign sector for imports of capital goods,

machinery, raw materials, consumer goods and services from abroad. These are the leakages from circular flow of money.

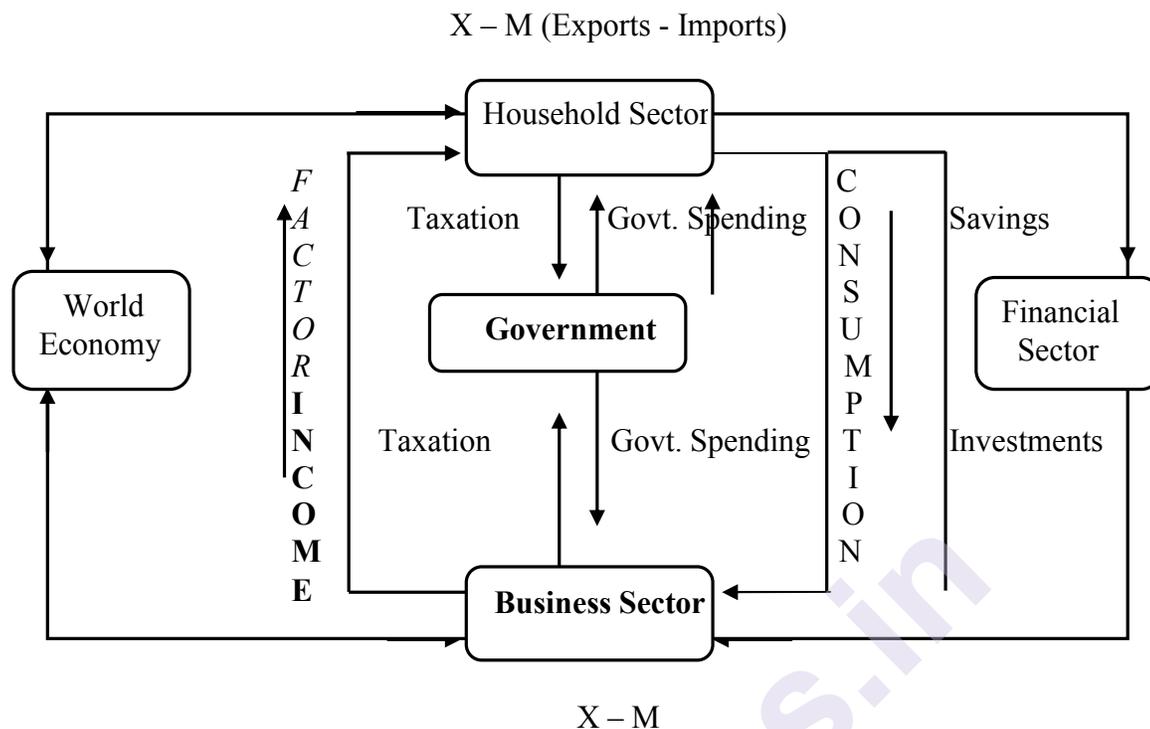


Fig.1.4

Like the business sector, modern governments also export and import of goods and services, and lend to and borrow from foreign countries. For all exports of goods, the government receives payments from abroad. Similarly, the government receives payments from foreigners when they visit the country as tourists and for receiving education, etc. and also when the government provides shipping, insurance and banking services to foreigners through the state-owned agencies. It also receives royalties, interests, dividends, etc. for investments made abroad. These are injections into the circular flow of money. On the other hand, the leakages are payments made to foreigners for the purchase of goods and services.

Figure 1.4 shows the circular flow of money in four sector open economy with saving at the right hand and taxes and imports at the left hand shown as leakages from the circular flow on the upper side of the figure, and investment, and government purchase (spending) on the right hand side and exports as injections into the circular flow, on the lower level left hand side of the figure. Further, imports, exports and transfer payments have been shown to arise from the three domestic sectors- the household, the business and the government. These outflows and inflows pass through the foreign sector which is also called the ‘Balance of Payments Sector.’

Thus Figure 1.4 shows the circular flow of money where there are inflows and outflows of money, receipts and payments among the business sector, the household sector, the government sector, and the foreign sector in current s and cross- currents.

1.9 IMPORTANCE OF CIRCULAR FLOW OF INCOME

1. To understand the functioning of the economy - Money being the life blood of a modern economy, its circular flow gives a clear picture of the economy. We can know from its study whether the economy is working smoothly or there is any disturbance in its smooth functioning. The circular flow of money is important for studying the functioning of the economy and for helping the government in formulating policy measures.
2. To understand the link between producers and consumers – The circular flow of money establishes a link between producers and consumers. It is through money that producers buy the services of factors of production from the household sector and in turn household sector purchases goods and services from the producers.
3. To find out the leakages in circular flow of income – Leakages or injections in the circular flow of money disturb the smooth function of the economy. For example, saving is a leakage out of the expenditure stream. If saving increases, this contracts the circular flow of money. This tends to reduce employment, income and prices thereby leading a deflationary process in the economy. On the other hand, consumption expenditure and investment are injections in the circular flow of money which help to increase employment, income, output and prices and thus lead to inflationary tendencies.
4. Highlights the importance of monetary and fiscal policies – The study of the circular flow of money also highlights the importance of monetary policy in bringing about the equality between savings and investment through the capital market. Similarly, it also points out the importance of fiscal policy in bringing about the equality between saving plus taxes and investment plus government expenditure.

To conclude, the circular flow of money possesses much theoretical and practical significance in an economy.

1.10 GROSS NATIONAL PRODUCT (GNP)

GNP is the total market value of all final goods and services produced in a year plus net income from abroad. This is the basic social accounting measure of the total output or aggregate supply of goods and services. GNP includes four types of final goods and services. First, consumer's goods and services to satisfy the immediate needs and wants of the people. Second, gross private domestic investment. Third, goods and services produced by government and fourth, net income from abroad i.e. net export of goods and services. GNP is the total amount of current production of final goods and services.

There are two things which have to be noted in regard to gross national product. Firstly, it measures the market value of annual output or it is a

monetary measure. This enables the process of adding up the different types of goods and services produced in a year. However, for accuracy, the figure for GNP is adjusted for price changes. Secondly, for calculating gross national product accurately, all goods and services produced in any given year must be counted only once. GNP includes only the market value of final goods and ignores transactions involving intermediate goods. Final goods are those goods, which are being purchased for final use and not for further processing. The inclusion of intermediate goods will involve double counting. This will give us an inflated figure of the national product.

In national income accounting, GNP is calculated both at market prices and factor cost. In order to calculate GNP at market prices, the outputs of all final goods and services are valued at market price and the values thus obtained are added. The market price of a good includes indirect taxes such as the sales tax and excise tax. Thus it is greater than the price received by the seller. Sometimes, the government may grant subsidy on a product. In this case, the market price would be less than the price received by the seller. GNP at factor cost eliminates the influences of indirect taxes and subsidies. It provides an estimate of the total value of the final goods and services produced during a year at cost of production.

GNP at factor cost is obtained by subtracting net indirect taxes from GNP at market prices.
$$\text{GNP at Factor cost} = \text{GNP at market price} - \text{Net indirect taxes} = \text{GNP at market prices} - (\text{Total indirect taxes} - \text{Subsidies})$$

National income is usually calculated by 3 methods

- (a) The product method.
- (b) The income method
- (c) The expenditure method

In the product method, GNP is the value added by the various industries and activities of the economy in a particular year. In the income method, we add up the income earned by the owners of factors of products in a particular year. This gives the gross national income (GNI). In the expenditure method; we add up the final expenditure of all residents in a country. All the three different ways of looking at one and the same thing.

1.11 GROSS DOMESTIC PRODUCT (GDP)

GDP refers to the value of final goods and services produced within the country in a, particular year. GDP is different from GNP. A part of GNP may be produced outside the country. For example the money earned by the Indian's working in USA is a part of India's GNP. But it is not a part of GDP since they are earned abroad. Therefore the boundaries of GNP are determined by the citizens of a country whereas the boundaries of GDP are determined by the geographical limits of a country. It is also clear that the difference between GDP and GNP is due to the "net revenue from abroad."

If the citizens of a country are earning more from abroad than foreigners are earning in that country, GNP exceeds GDP. If the foreigners in the country are earning more than its citizens are earning abroad, GNP is less than GDP.

1.11.1 Net National Product :-

This is a very important concept of national income. In the production of gross national product, during a year, some capital is used up or consumed i.e. equipment, machinery etc. the capital goods wear out or undergo depreciation. Capital goods fall in value due to its use in production process. By deducting the charges for depreciation from the gross national product, we get the net national product. It means the market value of all the final goods and services after providing for depreciation. It is called national income at market prices. In other words, net national product is the total value of final goods and services produced in the country during a year after deducting the depreciation, plus net income from abroad.

1.11.2 Net Domestic Products:-

NDP is obtained by subtracting the depreciation from the GDP. NDP differs from MNP due to the net income from abroad. If the net income from abroad is positive, NDP will be less than NNP. If the net income from abroad is negative, NDP will be greater than NNP. NDP is also calculated either at market price or at factor cost.

National Income at Factor Cost:- means sum total of all income earned by resource suppliers for their contribution of land, labour, capital and entrepreneurial ability which go into the year's net production. National income at factor cost shows how much it costs society in terms of economic resources to produce the net output. We use the term national income for the national income at factor prices.

National Income at factor cost = Net national product (National Income at market prices) - (indirect taxes +Subsidies)

1.12 PERSONAL INCOME

Personal income is the sum of the income actually received by individuals or households during a given year. Personal incomes earned are different from national income. Some incomes which are earned such as social security contributions corporate income taxes and undistributed corporate profits are not actually received by households. In the same manner, some incomes which are received like transfer payments are not currently earned ex Old age pension, unemployment compensation, relief payments interest payments etc. To get personal income from national we must subtract from National income the three types of incomes which are earned but not received and add incomes that are not currently earned, Personal income = N.I. - Social Security - contributions - corporate income taxes - undistributed corporate profit + Transfer Payments

1.13 DISPOSABLE INCOME

The personal income which remains after payment of taxes to the government in the form of income tax, personal property tax etc., is called disposable income. Disposable income = Personal Income - Personal Taxes. An individual can decide to consume or save the disposable income as he wishes.

Check Your Progress :

1. Generally three methods are use to calculate national Income- Explain.
2. Distinction Between : NNP and NDP

1.14 METHODS OF MEASUREMENT OF NATIONAL INCOME

For measuring national income, the economy through which people participate in economic activities, earn their livelihood, produce goods and services and share the national products is viewed from three different angles :

1. The national economy is considered as an aggregate of producing units combining different sectors such as agriculture, mining, manufacturing, trade and commerce, etc.
2. The whole national economy is viewed as a combination of individuals and households owing different kinds of factors of production which they use themselves or sell factor services to make their livelihood.
3. The national economy may also be viewed as a collection of consuming, saving and investing units (individuals, households and government).

National income may be measured by three different corresponding methods :

- A) Net product method
- B) Factor-income method
- C) Expenditure method

1.15 NET OUTPUT OR VALUE ADDED METHOD

It is also called the Value Added Method. It consists of three stages: i) estimating the gross value of domestic output in the various branches of production; ii) determining the cost of material and services used and also

the depreciation of physical assets; iii) deducting these costs and depreciation from gross value to obtain the net value of domestic output.

Measuring gross value : For measuring the gross value of domestic product, output is classified under various categories and it is computed in two alternative ways : i) by multiplying the output of each category of sector by their respective market price and adding them together, or ii) by collective data about the gross sales and changes in inventories from the account of the manufacturing enterprises and computing the value of GDP on the basis thereof. If there are gaps in data, some estimates are made thereof and gaps are filled.

Estimating cost of production : is, however a relatively more complicated and difficult task because of non-availability of adequate and requisite data. Countries adopting net-product method find some ways and means to calculate the deductible cost. The costs are estimated either in absolute terms or as an overall ratio of input to the total output. The general practice in estimating depreciation is to follow the usual business practice of depreciation accounting.

Following a suitable method, deductible costs including depreciation are estimated for each sector. The cost estimates are then deducted from the sectoral gross output to obtain the net sectoral products. The net sectoral products are then added together. The total thus obtained is taken to be the measure of net national products or national income by net product method.

1.16 FACTOR - INCOME METHOD

This method is also known as income method and factor-income method. Under this method, the national income is calculated by adding up all the incomes accruing to the basic factors of production used in producing the national product. The total factor-incomes are grouped under three categories :

Labour income : included in the national income have three components :
 a) wages and salaries paid to the residents of the country including bonus and commission and social security payments; b) supplementary labour incomes including employer's contribution to social security and employers welfare funds and direct pension payments to retired employees; c) supplementary labour incomes in kind, e.g. free health and education, food and clothing, and accommodation, etc. Compensations in kind in the form of domestic servants and other free-of-cost services provided to the employees are included in labour income. War bonuses, pensions, service grants, are not included in labour income as they are regarded as transfer payments. Certain other categories of income, e.g., incomes from incidental jobs, gratuities, tips etc., are ignored for lack of data.

Capital income : According to Studenski, capital income include the following capital earnings

Dividends excluding inter-corporate dividends;

Undistributed before-tax profits of corporations;

Interest on bonds, mortgages, and savings deposits (excluding interests on war bonds, and on consumer-credit)

Interest earned by insurance companies and credited to the insurance policy reserves;

Net interest paid out by commercial bank

Net rents from land, building, etc., including imputed net rents on owner-occupied dwellings;

Royalties;

Profits of government enterprises.

iii) Mixed income : include earnings from

Farming enterprises;

Sole proprietorship (not included under profit or capital income)

c) Other professions, e.g., legal and medical practices, consultancy services, trading and transporting etc. This category also includes the incomes of those who earn their living through various sources as wages, rent on own property, interest on own capital, etc.

All these three kinds of incomes added together give the measure of national income by factor income method.

1.17 EXPENDITURE METHOD

Also known as final product method, measures national income at the final expenditure stages. In estimating the total national expenditure, any of the two following methods are follows;

First, all the money expenditures at market price are computed and added up together, and Second, the value of all the products finally disposed of are computed and added up, to arrive at the total national expenditure.

The items of expenditure which are taken into account under the first method are

Private consumption expenditure;

Direct tax payments;

Payments to the non-profit making institutions and charitable organizations like schools, hospitals, orphanages, etc., Private savings. Under the second method, the following items are considered

Private consumer goods and services;

Private investment goods;

Public goods and services;

Net investment abroad.

The second method is more extensively used because the data required in this method can be collected with greater ease and accuracy.

Treatment of Net Income from abroad :

Nowadays, most economies are open in the sense that they carry out foreign trade in goods and services and financial transactions with the rest of the world. In the process, some nations get net income through foreign trade while some lose their income to foreigners. The net earnings or loss in foreign trade affects the national income. In measuring the national income, therefore, the net result of external transactions are adjusted to the total. Net incomes from abroad are added to, and net losses to the foreigners are deducted from the total national income arrived at through any of the above three methods.

Briefly speaking, all exports of merchandise and of services like shipping, insurance, banking, tourism and gifts are added to the national income. And all the imports of the corresponding items are deducted from the value of national output to arrive at the approximate measure of national income. To this is added the net income from foreign investment. These adjustments for international transactions are based on the international balance of payments of the nations.

1.18 MEASUREMENT OF NATIONAL INCOME IN INDIA

In India, a systematic measurement of national income was first attempted in 1949. Earlier, many attempts were made by some individuals and institutions. The earliest estimate of India's national income was made by Dadabhai Naoroji in 1867-68. Since then many attempts were made, mostly by economists and the government authorities to estimate India's national income. These estimates differ in coverage, concepts and methodology and are not comparable. Besides, earlier estimates were mostly for one year, only some estimates covered a period of 3 to 4 years. It was therefore not possible to construct a consistent series of national income and assess the performance of the economy over a period of time.

In 1949, a National Income Committee (NIC) was appointed with P.C. Mahalanobis as its Chairman, and Dr. D.R. Gadgil and V.K.R.V. Rao as

members. The NIC not only highlighted the limitations of the statistical system of that time but also suggested ways and means to improve data collection systems. On the recommendation of the Committee, the Directorate of National Sample Survey was set up to collect additional data required for estimating national income. Besides, the NIC estimated the country's national income for the period from 1948-49 to 1950-52. In its estimates, the NIC also provided the methodology for estimating national income, which was followed till 1967.

In 1967, the task of estimating national income was given to the Central statistical Organization (CSO). Till 1967, the CSO had followed the methodology laid down by the NIC. Thereafter, the CSO adopted a relatively improved methodology and procedure which had become possible due to increased availability of data. The improvements pertain mainly to the industrial classification of the activities. The CSO publishes its estimates in its publication, Estimates of National Income.

Methodology :- Currently, output and income methods are used by the CSO to estimate the national income of the country. The output method is used for agriculture and manufacturing sectors, i.e., the commodity producing sectors. For these sectors, the value added method is adopted. Income method is used for the service sectors including trade, commerce, transport and government services. In its conventional series of national income statistics from 1950-51 to 1966-67, the CSO had categorized the income in 13 sectors. But, in the revised series, it had adopted the following 15 break ups of the national economy for estimating the national income;

Forestry and logging;

Fishing;

Mining and quarrying;

Large-scale manufacturing;

Small-scale manufacturing;

Construction;

Electricity, gas and water supply;

Transport and communication;

Real estate and dwellings;

Public administration and Defence;

Other services;

External transactions.

National Income is estimated at both constant and current prices.

Check Your Progress :

1. Write notes on the following :

Net output method

Factor income method

c) Expenditure method

1.19 SUMMARY

1. As macroeconomics deals with aggregate quantities of the economy as a whole, it is also called as aggregative economics. Theories of National Income, consumption, saving and investment, theory of employment, theories of economic growth, business cycles and stabilization policies, theories of money supply and demand and theory of foreign trade broadly constitute the subject matter of macroeconomics. Macroeconomic theories are used in formulating public policies. They provide clarity to the macroeconomic concepts and quantities and bring out the relationship between macro variables of the economy in the form of models or equations.
2. The circular flow of money refers to the process whereby money payments and receipts of an economy flow in a circular manner continuously over a period of time.
3. Product and money flow in opposite direction in a circular way. The product flow consists of a) factor flow, that is flow of factor services and b) goods flow that is flow of goods and services. In a monetized economy the flow of factor services generates money flows in the form of factor payments which take the form of money flows. The factor payments and expenditure on consumer goods and services take the form of expenditure flow. Expenditure flow is in the form of money flow. Both income and expenditure flow in a circular manner in opposite direction.
4. In a two sector model of circular flow, the household and business firms which represent a closed economy and there is no government and no foreign trade. The household sector owns all the factors of production that is land, labour, capital and enterprise. This sector receives income in the form of rent, wages, interest and profit, by selling the services of these factors to the business sector. The business sector consists of producers who produce goods and sell them to the household sector. The household sector consists of consumers who buy goods produced by the business sector.
5. In a three sector economy additional sector is government sector. Government affects the economy in many ways. Government receives income in the form of taxes from households and business firms. Taxes are paid by the households and business firms which not only reduces their disposable income but also their expenditure and savings.

Governments' spending includes expenditure on goods and services, pension payments, unemployment allowance etc. Money spent by Government is an injection of income into the economy which further received by the households and business firms. Another important method of financing Government expenditure is borrowing from financial market. This is represented by money flow from the financial market to the Government is labeled as Government borrowing.

6. Four sector open economy the circular flow of income shows where there are inflows and outflows of money, receipts and payments among the business sector, the household sector, the government sector, and the foreign sector in current s and cross- currents.
7. GNP is the total market value of all final goods and services produced in a year plus net income from abroad. This is the basic social accounting measure of the total output or aggregate supply of goods and services.
8. GDP refers to the value of final goods and services produced within the country in a, particular year. GDP is different from GNP.
9. Net national product is the total value of final goods and services produced in the country during a year after deducting the depreciation, plus net income from abroad.
10. NDP is obtained by subtracting the depreciation from the GDP.
11. Personal income is the sum of the income actually received by individuals or households during a given year. $\text{Personal income} = \text{N.I} - \text{Social Security} - \text{contributions} - \text{corporate income taxes} - \text{undistributed corporate profit} + \text{Transfer Payments}$
12. The personal income which remains after payment of taxes to the government in the form of income tax, personal property tax etc., is called disposable income. $\text{Disposable income} = \text{Personal Income} - \text{Personal Taxes}$.
13. National income may be measured by three different corresponding methods :
 - A) Net product method
 - B) Factor-income method
 - C) Expenditure method

1.20 QUESTIONS

1. Explain the scope and importance of macroeconomics.
2. Explain the circular flow of national income in a two sector economy.
3. Discuss the three sector model of circular flow of national income.
4. Briefly explain circular flow of national income in an open economy.
5. Explain various national income accounting concepts.
6. Differentiate between personal income and disposable income.
7. Describe various methods of measurement of national income.



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TRADE CYCLES

Unit Structure :

- 2.0 Objectives
- 2.1 Introduction
- 2.2 Features of Business / Trade Cycles
- 2.3 Phases of Business Cycles
- 2.4 Introduction of the Classical Theory of Income and Employment
- 2.5 Say's Law of Market
- 2.6 Summary
- 2.7 Questions

2.0 OBJECTIVES

- To study various features of Trade cycle
- To understand different phases of trade cycles
- To understand the meaning of different phases of trade cycles
- To study classical theory of macroeconomics

2.1 INTRODUCTION

Business cycles / trade cycles are inevitable in an economy. To study their different phases and features therefore helps the economy to take remedial measures to maintain economic stability.

National income and employment are macroeconomic concepts which helps to achieve economic growth and development of the country at a faster rate. The views of classical economists are useful to understand these concepts.

2.2 FEATURES OF BUSINESS / TRADE CYCLES

Though different business cycles differ in duration and intensity they have some common features which can explain below.

1. A business cycle is a wave like movement in macro economic activity like income, output and employment which shows upward and downward trend in the economy.
2. Business cycles are recurrent and have been occurring periodically. They do not show some regularity.

3. They have some distinct phases such as prosperity, recession, depression and recovery.
4. The duration of business cycles may vary from minimum of two years to a maximum of ten to twelve years.
5. Business cycles are synchronic. That is they do not cause changes in any single industry or sector but are of all embracing character. For example, depression or contraction occurs simultaneously in all industries or sectors of the economy. Recession passes from one industry to another and chain reaction continues till the whole economy is in the grip of recession. Similar process is at work in the expansion phase or prosperity.
6. There are different types of business cycles. Some are minor and others are major. Minor cycles operate for a period of three to four years and major business cycles operate for a period of four to eight years. Though business cycles differ in timing, they have a common pattern of sequential phases.
7. Expansion and contraction phases of business cycle are cumulative in effect.
8. It has been observed that fluctuations occur not only in level of production but also simultaneously in other variables such as employment, investment, consumption, rate of interest and price level.
9. Another important feature of business cycles is that downswing is more sudden than the changes in upswing.
10. An important feature of business cycles is profits fluctuate more than any other type of income. The occurrence of business cycles causes a lot of uncertainty for business and makes it difficult to forecast the economic conditions.
11. Lastly, business cycles are international in character. That is once started in one country they spread to other countries through trade relations between.

2.3 PHASES OF BUSINESS CYCLES

Business cycles have shown distinct phases, the study of which is useful to understand their fundamental causes. Generally, a business cycle has four phases.

1. Prosperity (Expansion, Boom, or Upswing)
2. Recession (upper turning point)
3. Depression (Contraction or Downswing) and
4. Revival or Recovery (lower turning point)

The four phases of business cycle are shown in the following figure. It starts from trough or lower turning point when the level of economic activity is at the lowest level. Then it passes through recovery and prosperity phase, but due to the causes explained below the expansion cannot continue indefinitely, and after reaching peak, recession and depression or downswing starts. The downswing continues till the lowest turning point and reaches to trough. It is important to note that no phase has any definite time period or time interval. Similarly any two business cycles are not the same.

The prosperity starts at trough and ends at peak. The recession starts at peak and ends at trough. One complete period of such movement is called as a trade cycle.

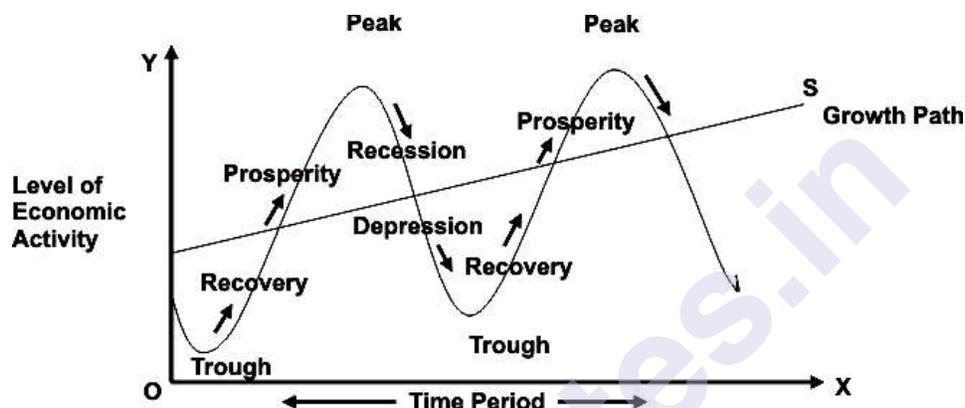


Fig. 2.1

Four phase of trade cycles are briefly explained as follows.

1. Prosperity – Prosperity is ‘a stage in which the money income, consumption, production and level of employment are high or rising and there are no idle resources or unemployed workers.’

This stage is characterized by increased production, high capital investment, expansion of bank credit, high prices, high profit, a high rate of interest, full employment income, effective demand, inflation MEC, profits, standard of living, full employment of resources, and overall business optimism etc.

The prosperity comes to an end when forces become weak and therefore, bottlenecks start to appear at the peak of prosperity. Due to high profit, inflation and over optimism make the entrepreneurs to invest more and more. But because of shortage of raw material and scarcity of factors of production prices of goods and services rises. As a result there is fall in demand and profit, business calculations go wrong. Thus their over optimism is replaced by over pessimism. Thus prosperity digs its own grave.

2. Recession- When the phase of prosperity ends, recession starts. Recession is an upper turning point. This is a phase of contraction or slowing down of economic activities. Recession is generally of a short duration.

After boom, demand falls, production becomes excess and investment results in over investment. Finally, it leads to recession.

During this phase profit, investment and share prices falls significantly, Because of lack of investment the demand for bank credit, rate of interest, income employment, and demand for goods and services falls.

If recession continues for a long period of time then finally, it reaches to the phase of depression.

3. Depression – It is a period in which business or economic activity in a country is far below the normal. Depression is ‘a stage in which the money income, consumption, production and level of employment falls, idle resources and unemployment increases.’

It is characterized by a sharp reduction of production, mass unemployment, low employment, falling prices, falling profits, low wages, and contraction of credit, fall in aggregate income, effective demand, MEC, a high rate of business failure and atmosphere of all round pessimism etc. The depression may be of a short duration or may continue for a long period of time.

After a period of time, moderate increase in the demand for goods and services helps to increase in investment, production, employment, income and effective demand. Finally, it leads to recovery.

4. Recovery – Depression phase is generally followed by recovery. Various exogenous and endogenous factors are responsible for reviving the economy. When the economy enters the phase of recovery, economic activity once again gathers momentum in terms of income, output, employment, investment and effective demand. But the growth rate lies below the steady growth path.

Thus, a recovery phase starts which is called the lower turning point. It is characterized by improvement in demand for capital stock, rise in demand for consumption good, rise in prices and profits, improvement in the expectations of the entrepreneurs, slowing rising MEC, slowly increasing investment, rise in employment, output and income, rise in bank credit, stock market becomes more sensitive and revival slowly emerges etc.

The phase of recovery once started, it slowly takes the economy on the path of expansion and prosperity. With this the cycle repeats itself.

Check your Progress :

1. What is a business cycle? What are its different features?
2. What is a business cycle? Explain the different phases of a trade cycle.

2.4 INTRODUCTION OF THE CLASSICAL THEORY OF INCOME AND EMPLOYMENT :

The study of classical theory of income and employment is essential because some of the aspects of classical theory are more relevant to the conditions prevailing in the developing countries. Classical theory highlights those factors, which govern income and employment in these countries. In fact Keynesian macro economic model is not able to explain the conditions of unemployment and underemployment in less developed countries. Hence it cannot explain the determination of income and employment in such countries.

Hence it is necessary to study the classical theory

The classical theory of employment is a supply-oriented theory. It is the product of an accumulation and refinement of ideas developed by the 18th and 19th century economists. The classical economists were basically concerned with the long run problem of growth of the economy's production capacity and efficient allocation of the given resources at full employment. The classical economists focused their attention more on the supply side and demand side was neglected while discussing the growth process. According to Adam Smith, Ricardo, Say, Mill and followers of classical thought, except Malthus believed that there is no problem on the demand side as the aggregate demand would always take care of itself. Hence the main problem is that of supply rather than demand.

According to the classical economists if prices and wage rates were flexible, there would be a built in tendency for the economy to operate at full employment. As a result they ignored the problems of unemployment. The classical economists focused on the following problems:-

- 1 The different types of goods and services that would be produced in the economy
2. The allocation of productive resources among the competing firms and industries. The classical economists tried to find out the conditions leading to the most efficient use and optimum allocation of the given resources.
- 3 The relative price structure of different goods and factors
- 4 The distribution of real income among the productive factors. The main postulates of the classical theory of employment are the following.
 1. Long term analysis
 - 2 Full employment
 3. Say's law of markets
 - 4 interest Rate and Flexibility
 5. Wage rate and Flexibility

2.4.1 The Assumption of Full Employment:-

The classical economists believed in the prevalence of a stable equilibrium at full employment as the normal characteristic in the long run. Any deviation from this is abnormal under perfect competition in a free capitalist economy, forces operate in the economic system which tend to maintain full employment without inflation. As a result, the level of output is always at full employment with the optimum use of resources in the long run. Full employment is a condition where there is absence of involuntary unemployment to restore full employment again.

The classical theory believed in full employment as a normal condition. This was on certain basic assumptions. –

1. Say's law of market- Supply creates its own demand according to Say's law. Hence there can never be any deficiency of demand.
2. Any unemployment that in the process of a competitive system is automatically eliminated by the free market price system

2.5 SAY'S LAW OF MARKET

The belief of classical theory regarding the existence of full employment in the economy is based on Say's Law put forward by a French economist J. B. Say. According to J. B. Say's law, "Supply creates its own demand". This implies that any increase in production made possible by the increase in the productive capacity or the stock of fixed capital will be sold in the market. There will be no problem of lack of demand. This appears to be a simple proposition. But it has a number of implications.

Say's law contends that the production of output in itself generates purchasing power, equal to the value of that output, supply creates its own demand. Production increases not only the supply of goods but by virtue of the requisite cost payment to the factor of production, also creates the demand to purchase these goods. Any production process has two effects:

1. As factors are employed in production process, income is generated in the economy on account of the payment of remuneration to the factors of production.
2. It results in the production of a certain level of output, which is supplied in the market. According to Say's law additional output creates additional incomes which creates an equal amount of extra expenditure.

A new production process, by paying out income to its employed factors generates demand at the same time, as it adds to supply. Thus any increase in production is followed by a matching increase in demand.

In the original form Say's law was applicable to a barter economy. In a barter economy, people produce goods either to consume or to exchange them for other products. In the process the aggregate demand for goods equals the aggregate supply of goods. Hence there is no possibility of over production. Introduction of money also does not change the basic law.

Money is used only as a medium of exchange. The classical theorists believed that money is neutral and does not influence the real process of production and distribution. There is a circular flow of money from the firm to households and from households to firms. The firm purchases inputs for production. They pay in the form of wages, rent, interest and profits. This becomes the income of households. The households spend their income on goods and services produced by firms. In this circular flow there is no saving and hoarding. All income received is spent. In case the household saves a part of the income, the circular flow can still be maintained if savings are equal to investment.

If there is a divergence between saving and investment, the equality is maintained through the flexibility of money interest. Interest is a reward for saving. Higher the interest, more are the savings and vice-versa. At the same time, lower the interest rate, higher the demand for investment and vice-versa. If $I > S$ rate of interest will rise. Savings will also increase and investment will fall till the two become equal.

2.5.1 Assumptions of the Law

The following assumption forms the backbone of Say's law.

1. Optimum Allocation of Resources:- The resources are optimally allocated in different channels of production on the basis of equality of marginal products and proportionality.
2. Perfect Equilibrium:- Demand and supply equilibrium leads to the fixing of commodity price and factor prices.
3. Perfect Competition:- The commodity and the factor markets have perfect competition as the market conditions.
4. There is a free enterprise or free market economy.
5. Laissez-faire policy of the government:- There is no government intervention in the economic field. Laissez-faire policy leads to automatic adjustment and smooth working of the market mechanism in the capitalist system.
6. Elastic Market:- The market is very wide and spread out without limits. Therefore as the output product increases, markets also expand.
7. Market Automatism:- A free market economy stimulates capital formation. In an expanding economy, new workers and firms will be automatically absorbed into the production channels. There is no displacement of workers or firm.
8. Circular Flow:- There is no break in the circular flow of income and expenditure. Income is automatically spent through consumption expenditure, and investment expenditure.

9. Saving Investment Equality:- All the savings are automatically invested. Therefore, savings is always equal to investment. Savings investment equality is the basic condition of equality. Interest flexibility ensures this.
10. Long term :- The economy's equilibrium process is considered from the long term point of view.

Thus according to Say's law, when savings will be offset by an equivalent investment and since hoarding is zero, aggregate demand will always be equal to aggregate supply. Hence there will be no general over production in the long run. Therefore, equilibrium can be maintained automatically at full employment level. Since over-saving is not possible; Say s Law implied that underemployment equilibrium is not possible.

Interest rate flexibility and wage flexibility are the 2 factors which ensures this equilibrium between be discussed.

1. Interest Rate Flexibility :- According to Say's law, all incomes are spent i.e. income = expenditure. However, there may be "leakages" in the circular flow of income & expenditure. Whatever is saved is invested in production activities. Savings and investments tor saving. If savings exceed investment, the rate of interest will fall. Hence investment will rise and level of savings will fall till they are in equilibrium. Therefore, in classical theory of employment, the rate of interest is a strategic variable, which brings about equality between savings and investment Interest rate maintains the equilibrium between savings and investment.

2. Wage Rate Flexibility and Employment :- According to the classical economist, money wage cut policy can solve the problem Involuntary employment is due to a rigid wage structure. If the wages can be lowered, involuntary unemployment will disappear. A self-adjusting system of wage will push the economy towards full employment stage.

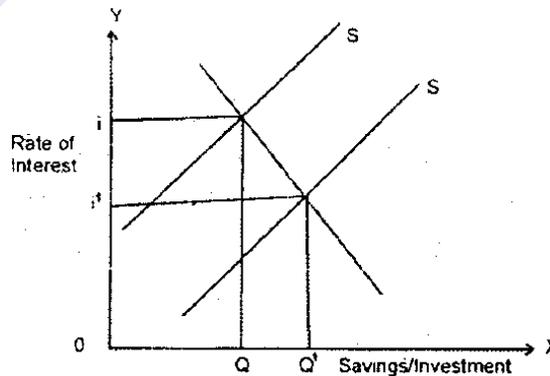


Figure 2.2

2.5.2 Implications of Say's Law:-

1. Automatic Adjustment of Full Employment- A free enterprise economy automatically reaches a stage of full employment level. There are no obstacles to full employment General employment and over production are impossible.

2. Self-adjusting Mechanism:- Increase in supply will ensure an increase in demand in the process of the functioning of a free capitalist economy. There is no need for government intervention.
3. Resource adjustment and utilisation of resources take place automatically in an expanding capitalist economy. When new workers and firms start operating, they also help to produce additional output and income. The entire economy becomes richer with the increased National Income. The unused and new resources are also productively employed in such a way as to benefit the whole society.
4. Money plays a passive role. It is only a medium of exchange to facilitate transactions. Behind the flow of money, there is a real flow of goods and services, which is important. As a result, changes in the supply of money has no effect on the economy's process of equilibrium at full employment level.
5. A free enterprise economy under Laissez-faire policy has built in flexibility. Market mechanism helps in optimum adjustments in the economy.
6. Rate of interest is an equilibrating factor in classical theory. Flexible interest rates lead to equilibrium between savings and investment.

2.5.3 Criticism:-

J.M. Keynes vehemently criticized the classical theory. The assumptions on which the classical theory is based can be criticized. The Great Depression of 1930's has revealed the weaknesses of the classical theory. The classical theory could not suggest a solution to the problem of a depressed economy facing large scale unemployment.

1. Unrealistic Assumptions at Full Employment:- According to Keynes. The basic assumption of full employment itself is unrealistic. An economy can be in a state of equilibrium. In under employment situation also full employment equilibrium is just one possible equilibrium condition according to Keynes.
2. Too much emphasis on Long Run:- Keynes gave importance to the short run. According to him. In the long run, we are all dead.
3. Keynes refuted Say's Law of Markets:- According to Keynes, the classical economists failed to examine the level of aggregate demand. Supply may not create demand. Over production is a possibility and reality according to Keynes. Supply can exceed demand. Hence automatic self adjusting mechanism will not work.
4. Interest is not an equilibrating factor:- Keynes attacked the classical theory in regard to savings and investment. Flexible interest rates will not lead to equilibrium savings and investment. Changes in income bring about the equilibrium between savings and investment according to Keynes.

5. Role of money is neglected:- The classical economists considered money as a veil. Its role is neutral. Keynes recognized the importance of precautionary measures and speculative demand for money. He also recognized the effect of money on output, incomes, employment.
6. Keynes attacked the Laissez faire policy of classical economists. In the conditions -of the modern world, state intervention is necessary to solve the problem of unemployment. Government spending, taxation and borrowing are important instruments to increase employment and income in an economy.
7. Wage cut policy is not practical. Due to the strong trade unionism it is not possible to cut wage rates as suggested by the classical economists as a remedy to employ more workers. A wage cut may in fact lead to reduced purchasing power with workers which will lead to reduced effective demand for products. This will adversely affect the levels of employment. Hence a general wage cut will lead to reduced volume of employment. The workers will revolt if the money wages are cut. This is due to money illusion.
8. The classical system will work only if there is perfect competition. In such a case there should not be trade unionism, wage legislation etc. But in reality, all these factors exist. Hence classical theory will not become applicable.

Check Your Progress :

1. Examine the statement : The classical theory was a supply oriented theory.
2. What are the main postulates of classical theory of employment?
3. State the assumptions of Say s Law of Markets.

2.6 SUMMARY

1. Though different business cycles differ in duration and intensity they have some common features.
2. A business cycle has four phases.
 - ❖ Prosperity (Expansion, Boom, or Upswing)
 - ❖ Recession (upper turning point)
 - ❖ Depression (Contraction or Downswing) and
 - ❖ Revival or Recovery (lower turning point)
3. Prosperity is a stage in which the money income, consumption, production and level of employment are high or rising and there are no idle resources or unemployed workers.

4. When the phase of prosperity ends, recession starts. Recession is an upper turning point. This is a phase of contraction or slowing down of economic activities. Recession is generally of a short duration.
5. Depression is a stage in which the money income, consumption, production and level of employment falls, idle resources and unemployment increases.
6. When the economy enters the phase of recovery, economic activity once again gathers momentum in terms of income, output, employment, investment and effective demand.
7. The belief of classical theory regarding the existence of full employment in the economy is based on Say's Law put forward by a French economist J B. Say. According to J. B. Say's law. "Supply creates its own demand". This implies that any increase in production made possible by the increase in the productive capacity or the stock of fixed capital will be sold in the market. There will be no problem of lack of demand.

2.7 QUESTIONS

1. What are the features of trade cycle?
2. What is a business cycle? Explain the different phases of a trade cycle.
3. Explain classical macroeconomics with special reference to Say's Law of Markets.
4. State and explain the Say's Law of markets.



MONEY, PRICES AND INFLATION-I

Unit Structure :

- 3.0 Objectives
- 3.1 Introduction
- 3.2 Concept of Money Supply
- 3.3 Constituents of Money Supply
- 3.4 Determinants of Money Supply
- 3.5 Velocity of Circulation of Money
- 3.6 Meaning of Money
- 3.7 Keynes' Theory of Demand for Money
- 3.8 The Liquidity Preference Theory of Interest
- 3.10 Friedman's Theory of Demand for Money
- 3.10 Questions
- 3.11 Summary

3.0 OBJECTIVES

- To understand the concept, constituents and determinants of money supply
- To study the concept of velocity of circulation of money
- To study Keynesian theory of demand for money
- To study Keynesian Liquidity Preference Theory of rate of Interest
- To study Friedman's theory of demand for money

3.1 INTRODUCTION

In this module we will study the concepts and theories related to money as one of the important aspect in macroeconomics. What are the constituents of money supply, what factors determine the supply of money in an economy, and the Keynesian and Friedman's approach to demand for money are explained in detail.

3.2 CONCEPT OF MONEY SUPPLY

Money supply refers to the amount of money which is in circulation in an economy at any given time. It is the total stock of money held by the people consisting of individuals, firms, State and its constituent bodies except the State treasury, Central Bank and Commercial Banks. The cash balances held by the Federal and federating governments with the Central Bank and in treasuries are not considered as part of money supply because they are created through the administrative and non-commercial operations of the government. Further money supply refers to the disposable stock of money. Therefore money supply is stock of money in circulation. Money supply can be looked at from two points of views, namely, money supply as a stock and money supply as a flow. Thus at a given point of time, the total stock of money and the total supply of money is different. Money supply viewed at a point of point is the stock of money held by the people on a given day whereas money supply viewed overtime is viewed as a flow. Units of money are spent and re-spent several times during a given period. **The average number of times a unit of money circulates amongst the people in a given year is known as Velocity of Circulation of Money.** The flow of money is measured by multiplying the stock of money with the coefficient of velocity of circulation of money.

3.3 CONSTITUENTS OF MONEY SUPPLY

There are two approaches to the constituents of money supply. They are the traditional and the modern approaches.

- 1. Traditional Approach:** According to the traditional approach, the money supply consists of currency money consisting of coins and notes and bank money consisting of checkable demand deposits with commercial banks. The currency money is considered high powered money because of the legal backing of the State. The Central Bank of a country issues currency notes and coins because it has the monopoly of note and coin issue. The supply of money in a country depends upon the system of note issue adopted by the country. For instance, India adopted the Minimum Reserve System in 1953. Under this system, the Reserve Bank of India has to maintain a minimum reserve of Rs.200 Crores consisting of gold and foreign securities. Out of this, the value of gold should not be less than Rs.115 Crores. With this reserves, the Reserve Bank of India has the power to issue unlimited amount of currency in the country.

Checkable demand deposits of commercial banks are used in the settlement of debt. Payments made through checks change the volume of demand deposits by creating derivative deposits. The creation of demand deposits is determined by the credit creation activities of the commercial banks. Bank money is considered as secondary money whereas cash money is known as high powered money. Thus according to the traditional approach, the total supply of money is the

sum of high powered money and secondary money or currency and bank money. The ratio of bank money to currency money depends upon the extent of monetization, banking habits and banking development in a country. In advanced countries, ratio of bank money to currency money is high whereas in poor countries the ratio of currency money to bank money is high.

2. **The Modern Approach:** According to the modern approach, money supply includes currency money and near money. Money supply therefore consists of coins, currency notes, demand deposits of commercial banks, time deposits of commercial banks, financial assets, treasury bills and commercial bills of exchange, bonds and equities.

RESERVE BANK OF INDIA'S APPROACH TO THE MEASUREMENT OF MONEY SUPPLY:

According to the Reserve Bank of India since its inception in 1935, money supply in the narrow sense of the term was the sum of currency with the people and demand deposits with the commercial banking system. Narrow money was denoted by the RBI by M_1 . In 1964-65, the concept of broad money or aggregate monetary resources was introduced. Broad money was considered equal to $M_1 +$ Time deposits with commercial banks. In March, 1970 the RBI accepted the report of the Second Working Group on Money Supply. This report was published in the year 1977 and it gave a broad definition of money supply. Accordingly, four measures of money supply were brought into effect.

These four measures are as follows:

1. M_1 = Currency with the public + Demand deposits with the commercial Banks + Other deposits with the RBI.
2. M_2 = M_1 + Post Office Savings Bank Deposits.
3. M_3 = M_1 + Time deposits with the commercial banks.
4. M_4 = M_3 + Total Post Office Deposits (excluding NSCs).

The Reserve Bank of India gives importance to narrow money (M_1) and broad money (M_3). Narrow money excludes time deposits because they are not liquid and are income earning assets while broad money includes time deposits because some liquidity is involved in it as these assets earn interest income in future. Since time deposits have become convertible in recent times, they have become more liquid than what they were before. The M_2 and M_4 measures of money supply include post office savings and other deposits with the post offices.

The third working group on money supply recommended the following measures of monetary aggregates through their report submitted in 1998:

1. M_0 = Currency in circulation + Bankers' deposits with the RBI + Other deposits with the RBI. (M_0 is compiled on weekly basis).
2. M_1 = Currency with the public + Demand deposits with the banking System + Other deposits with the RBI = Currency with the public + Current deposits with the banking system + Demand liabilities Portion of Savings Deposits with the banking system + other Deposits with the RBI.
3. M_2 = M_1 + Time liabilities portion of saving deposits with the banking System + Certificates of deposits issued by the banks + Term Deposits [excluding FCNR (B) deposits] with a contractual maturity of up to and including one year with the banking system = Currency with the public + current deposits with the banking System + Savings deposits with the banking system + Certificates Of Deposits issued by the banks + Term deposits [excluding FCNR (B) deposits] with a contractual maturity up to and including one year with the banking system + other deposits with the RBI.
4. M_3 = M_2 + Term deposits [excluding FCNR (B) deposits] with a Contractual maturity of over one year with the banking system + Call borrowings from Non-depository financial corporations by the Banking system. (M_1 , M_2 & M_3 are compiled every fortnight).

In addition to the monetary measures stated above, the following liquidity aggregates to be compiled on monthly basis were also recommended by the working group:

1. L_1 = M_3 + All deposits with the Post Office Savings Banks (excluding National Savings Certificates).
2. L_2 = L_1 + Term deposits with Term lending institutions and refinancing Institutions (FIs) + Term borrowing by FIs + Certificates of Deposits issued by FIs.
3. L_3 = L_2 + Public deposits of Non-banking Financial Companies.
(L_3 is compiled on quarterly basis).

3.4 DETERMINANTS OF MONEY SUPPLY

Currency in circulation and demand deposits are the main constituents of money supply. While the demand deposits are created by the commercial banks, currency is issued by the Central Bank and the Government. The supply of money is determined by the following factors:

1. **Size of the Monetary Base:** Money supply depends upon the size of the monetary base. The monetary base refers to the group of assets which empowers the monetary authorities to issue currency money.

Money supply changes with changes in the monetary base. The monetary base of an economy consists of monetary gold stock, reserve assets such as government securities, bonds and bullion, foreign exchange reserve with the central bank and the amount of central bank's credit outstanding. In the present times, gold stock is not considered as part of the monetary base.

2. **Community's Choice:** The relative amount of cash and demand deposits held by the people also influences the supply of money. If the people prefer to make check payments much more than cash payments, the total money supply maintained by a given monetary base would be larger and vice versa. Since money deposited in commercial banks generates derivative deposits and expand the supply of bank money through the credit multiplier, people's preference of bank money to cash would increase the supply of money. However, the choice of the community is determined by factors such as banking habits, per capita income, availability of banking facilities and the level of economic development. If these factors are developed, the money supply would be larger and vice versa.
3. **Extent of Monetization:** Monetization refers to the use of money as a medium of exchange. The choice of the community for money as a liquid asset depends upon the extent of monetization of the economy. If monetization is high, demand for money would be high and vice versa.
4. **Cash Reserve Ratio:** The Cash Reserve Ratio refers to the ratio of a bank's cash holdings to its total deposit liabilities. It determines the coefficient of the credit multiplier. The CRR is determined by the Central Bank of a country. The credit multiplier (m) is determined as the reciprocal of the CRR (r). Therefore $m = 1/r$. Excess funds with the commercial banks multiplied by the credit multiplier will give us the extent of credit creation by the commercial banks. Lower the CRR, greater will be value of the credit multiplier and therefore greater will be the supply of bank money and vice versa.
5. **Monetary Policy of the Central Bank:** Monetary policy is defined as the policy of the Central Bank with regard to the cost and availability of credit in the economy. The monetary policy of the Central Bank of any country will be according to the macro-economic conditions. Thus under inflationary conditions, the Central Bank may follow restrictive monetary policy and thereby reduce the supply of bank money by pursuing both qualitative and quantitative measures of controlling money supply. Similarly under recessionary conditions the Central Bank may follow expansionary monetary policy and thereby raise the supply of money in the economy.
6. **Fiscal Policy of the Government:** Fiscal Policy is defined as a policy concerning the income and expenditure of the government. While the government raises revenue through various sources like different types of taxes, borrowing and through deficit financing, it spends the money

raised for various developmental and non-developmental purposes. When the government raises revenue by imposing fresh taxes or by raising the existing level of taxes, it helps to reduce money supply. Similarly, market borrowing by the government reduces money supply and raises the market interest rates. This is known as the crowding out effect of government borrowing. When the government spends the money so raised, money supply increases. However, when the government runs a deficit budget, it adds to the existing stock of money supply and thus raises the supply of money in the economy. The opposite will be the impact of a surplus budget but surplus budgets are a rarity in modern times.

7. **Velocity of Circulation of Money:** Velocity of circulation of money refers to the average number of times a unit of money as a medium of exchange changes hands during a given year. Money supply is measured as total money in circulation multiplied by the velocity of circulation ($M \times V$). Thus higher the velocity of circulation of money, higher will be the money supply and vice versa.

3.5 VELOCITY OF CIRCULATION OF MONEY

The velocity of circulation of money determines the flow of money supply in an economy in a given period of time, normally such a period is one year. The average number of times a unit of money changes hands is known as the velocity of circulation of money. The supply of money in a given period is obtained by multiplying the money in circulation with the coefficient of velocity of circulation i.e., $M \times V$ where M refers to the total amount of money in circulation and V refer to the velocity of circulation of money in the given period.

Factors Determining Velocity of Circulation of Money: The velocity of circulation of money is determined by the following factors:

1. **Time Unit of Income Receipts:** The more frequently people receive income, the shorter will be the average time period of holding money and greater will be the velocity of circulation of money. Thus if in a given society large number of people receive income on daily basis, the velocity of circulation of money would be higher than the one in which people receive income on weekly, fortnightly or monthly basis.
2. **Method and Habits of Payment:** The velocity of circulation of money would be high if large number of people prefers to make payment on instalment basis. As a result, the same unit of money will change hands more often than when payments are made in full.
3. **Regularity of Income Receipts:** If in a society people receive income on a regular basis, they will spend their current income without bothering about future and hence the velocity of circulation of money would be high. However, if future income receipts are

uncertain, people will not spend more money in the present and hence the velocity will be less.

4. **Saving Habits of the People:** If the marginal propensity to save is high in a society, then the people will be spending less in the present and hence the velocity will be less. Similarly, if the marginal propensity to consume is high the people will spend more and the velocity of circulation of money will be high.
5. **Income Distribution:** Income distribution may be more equal or more unequal in a society. If inequalities of income are high in a society with the top 20 % taking away a major portion of the national income, velocity of circulation of money would be low because the richer sections of the society will be holding more idle cash balances. However, if income distribution is more equal or less unequal, the bottom 40% of the people will receive more incomes and spend more thereby increasing the velocity of circulation of money.
6. **Development of Banking and Financial System:** If the banking and financial institutions in a country are well developed, mobilization of savings can be effectively carried out and more credit made available to the needy. This not only prevents hoarding of cash balances but also increases the velocity of circulation of both currency and bank money.
7. **Business Cycle:** During the prosperity phase of the business cycle, investment, output, income, employment and prices rise. Thus the velocity of circulation of money would be high during the prosperity phase. However, during the downturn of the business cycle, investment, output, income, employment and prices begin to decline thereby reducing the velocity of circulation of money.
8. **Liquidity Preference of the People:** If the liquidity preference of the people is high i.e., if they wish to hold a greater part of their income in the form of idle cash balances, the velocity of circulation of money would be low and vice versa.
9. **Speedy Clearance of Checks and Transfer of Funds:** A more advanced banking system would help speedy clearance of checks and transfer of funds from one account to another account, thereby increasing the velocity of circulation of money.

3.6 MEANING OF MONEY

Money is defined in Economics as ‘anything that is generally accepted in payment for goods and services as a medium of exchange.’ Money consists of currency and checkable demand deposits. Money is different from income and wealth. While income refers to a flow of purchasing power which is used to make payments for the services obtained from the factors of production, wealth is a stock of accumulated purchasing power. While income is a flow variable that is measured over a given period of

time, wealth is a stock variable that is measured at a given point of time. While income is generally in the form of money and income in the form of money is known as nominal income, income in the form of goods and services is known as income in kind or real income. Real income is also measured in terms of constant prices. Wealth can be held in the form of monetary assets. Saving is the primary source of wealth. Money is the most liquid asset. The liquidity of assets refers to the ease with which an asset can be converted into a medium of exchange. Assets are classified as either financial assets or real assets and are ranked according to their liquidity. Currency, checkable deposits, savings deposits are the examples of liquid financial assets. Stocks and bonds are relatively less liquid financial assets. Precious metals like silver, gold, platinum etc are liquid real assets. Artwork, machinery and real estate are the examples of less liquid real assets. The liquidity of an asset is determined by the following factors:

1. Existence of a well established market in which the asset can be quickly sold.
2. Size of transaction costs (brokers fees, time costs)
3. Stability of the asset's price.

The price of a rupee is always a rupee. The prices of other assets measured in terms of money generally fluctuate. However, the value of a rupee is not fixed as it is measured in terms of purchasing power. For instance, at current prices a potato vada would cost you Rupees Ten a piece. In 1974 when I was studying in the fifth standard, Rupees Ten would fetch me 100 pieces of potato vada and with that money I could have arranged a potato vada party for 100 students. (The value of money: $V_m = 1/P$, where 'P' stands for price level.)

3.6.1 FUNCTIONS OF MONEY:

Money is a matter of functions four: medium, measure, standard and store. Money therefore has four important functions.

1. **Medium Of Exchange:** Money functions as a medium of exchange and hence permits a time interval between buying and selling goods and services. Money replaces barter where goods or services are traded directly for other goods or services. Barter does not provide a time interval between buying and selling goods and services. Money eliminates the need for a double coincidence of wants. For instance, a farmer who has jowar in his stocks and wants to trade it for wheat must find a person who has wheat and also wants to trade wheat for jowar. Money greatly improves the efficiency of transactions by reducing transactions costs. In a barter economy, transaction costs would include cost of search. The cost of search is eliminated in a monetary economy. In a monetary economy, the farmer only needs to find a person who wants to buy jowar and has the purchasing power to pay for it. The farmer need not be bothered if the person has wheat and is willing to trade wheat for jowar. The need for double coincidence of wants is eliminated in a monetary economy.

2. Unit of Account: A unit of account is a standard numerical unit of measurement of the market value of goods, services and other transactions. It is also known as a "measure" or "standard" of relative worth and deferred payment. Money as a unit of account is essential for entering into commercial agreements that involve debt and future payments. Money is divisible into small units without destroying its value. Precious metals can be coined from bars and melted down to bars again. Money is fungible, i.e., one unit or piece must be perceived as equivalent to any other commodity or service. Hence diamonds or works of art are not suitable as money. A specific weight, or measure, or size must be verifiably countable. For instance, coins are often made with ridges around the edges so that any removal of material from the coin leading to fall in its intrinsic value will be easy to detect. The unit of account is the unit in which values are stated, recorded and settled. Money is a means of measuring and recording value. Wheat is measured in kilograms. Distance is measured in kilometers. Value is measured in units of money. In barter, the value or price of every good and service must be measured in terms of the value of every other good and service. In a barter economy with only 100 goods there would be: $[(N(N-1))/2] = 4950$ prices. However, in a monetary economy with only 100 goods, there would be only 100 prices. At current prices, a kilogram of wheat would be accounted in the range of Rs.25 to Rs.35 and a kilogram of rice would be accounted in the range of Rs.30 to Rs.50.

3. Store of Value: Since money, as a medium of exchange, represents purchasing power, it can be stored and used in the future. Money is a store of value but it is not usually a good store of value. During inflation, money loses its value. The value of money is inversely related to the price level. Higher the price level, lower will be the value of money and vice versa. Symbolically, the value of money can be found out with the following formula:

$$V_m = 1/P$$

Assuming the price level to be 100, the value of Rs. 100 would be 100. If the price level goes up to 200, the value of Rs. 100 would be only 50. Money may therefore not be acceptable as a store of value during periods of high inflation. Instead, people may prefer to store value in the form of gold and real estate.

4. Standard of Deferred Payments: Deferred payment means future payments. Money is used as a standard of deferred payments and hence debt contracts are signed in monetary terms. Loans and future payments are agreed and contracted in monetary terms as money units are accepted as the means of settling future accounts. However, during periods of very high inflation, money may not be used as a standard of deferred payments because the future value of present money is inversely related to the general price level i.e. when the price level goes up, the value of money falls. Thus during inflationary periods, money may be used as a medium of exchange but not as a standard of deferred payments.

3.7 KEYNES' THEORY OF DEMAND FOR MONEY

Keynes put forward his theory of demand for money in his famous work "The General Theory of Employment, Interest and Money" (1936). According to Keynes, people hold cash balances on account of three reasons or motives. These are the transaction motive, the precautionary motive and the speculative motive. Accordingly the demand for money can be separated into three parts namely transaction demand, precautionary demand and speculative demand for money. The total demand for money or cash balances can be divided into two namely; active and idle cash balances.

Active Cash Balances:

Demand for active cash balances is divided into transaction and precautionary demand for money. The **transaction demand** for money arises due to the fact that money is a medium of exchange. Further receipts and payments do not take place simultaneously. There is always a time gap between two successive receipts and payments are an ongoing affair in the routine course. Hence people need to hold cash balances to pay for their regular transactions. According to Keynes, transaction motive for holding money is the need of cash for the current transactions of personal and business expenditure. Therefore, households and firms hold money on account of the transaction motive. Their respective transactions motives can be referred to as income and business motives. The income motive refers to the transaction motive of households. Families hold cash balances to execute routine transactions. Household demand for money depends upon the following factors:

- 1. The Level of Income:** Transaction demand for money by the households is directly related to the level of income, i.e. higher the level of income, higher will be the transaction demand for money and vice versa.
- 2. The Price Level:** Higher the price level, higher will be the transaction demand for money and vice versa. When prices rise, more money will be required to purchase the same quantity of goods and services and hence the transaction demand for money would rise when prices rise.
- 3. The Spending Habits:** If the people in a society are thrifty, they would require less money for transactions purposes. However, if large number of persons in a society is spendthrift, they would require more money for transaction purposes.
- 4. The Time Interval:** If the time interval between two successive income receipts is big, then the people will hold larger cash balances under transaction motive and vice versa.

Similarly, firms need cash balances to pay for raw materials, transport, wages and salaries and other payments. Cash balance held by firms to satisfy these requirements is the money held under **business motive**. The

quantum of money held under business motive is directly related to the turnover of firms i.e. larger the turnover, larger will be the amount of money held under business motive.

Transactions demand for money is therefore the sum of money held under income motive and business motive. It is income determined and remains stable in the short run because income change takes place only in the long run. Transactions demand for money is an increasing function of income. Symbolically, the transactions demand for money function can be stated as follows:-

$$L_t = f(Y)$$

Where; L_t = Liquidity preference under transactions motive.

Y = Level of national income.

People also hold cash balances to provide for unforeseen requirements. The amount of cash balances held by people to provide for unforeseen requirements is referred to as precautionary demand for money or money held under precautionary motive. Sickness, unemployment, death, accidents etc are some of the unforeseen events which may take place in the lives of people. The precautionary demand for money depends upon uncertainty of future receipts. It is directly related to income and relatively stable. The precautionary demand for money is interest inelastic and changes in response to changes in uncertainty. Symbolically, the precautionary demand for money can be stated as follows:

$$L_p = f(Y)$$

Where; L_p = Liquidity preference under precautionary motive.

The transaction and precautionary demand for money cannot be easily separated in practice and since both the money demand functions are income determined and also interest inelastic, they are collectively known as **active balances**. Symbolically, the demand for active balances can be stated as follows:

$$L_1 = L_t + L_p$$

Both transaction and precautionary demand for money is income determined, we can restate the money demand function for active balances as follows:

$$L_1 = f(Y)$$

The demand for active balances is graphically depicted in Fig. 3.1 below.

You will notice that at income level OY_1 , OM_1 is the demand for active cash balances. When income level rises to OY_2 , the demand for active cash balances also rises to OM_2 . The demand for active cash balances is proportionate to changes in income.

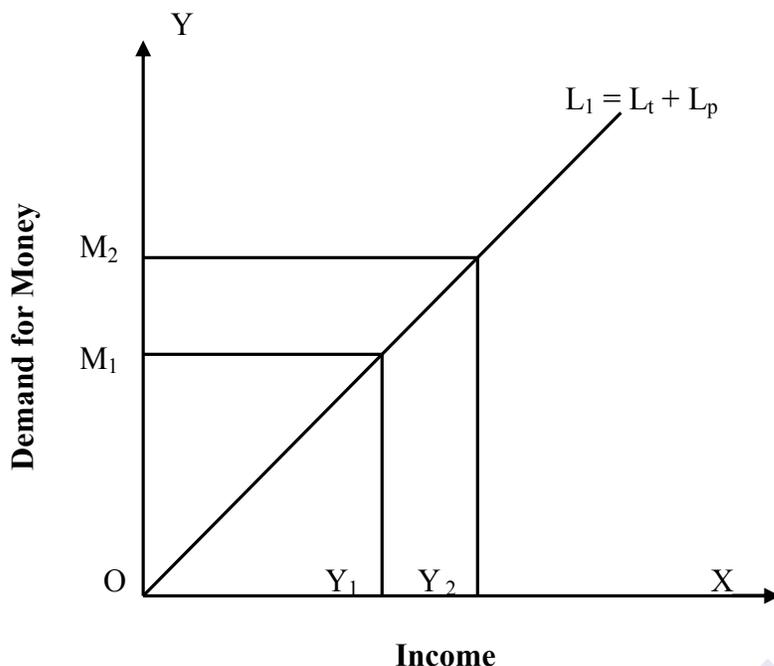


Fig. 3.1: Demand for Active Cash Balances

Idle Cash Balances (Speculative Demand for Money):

The cash balances held by people for speculative purposes are known as demand for idle cash balances. The speculative motive for holding cash balances originates from uncertainty about the future rate of interest. Speculative demand for money arises because of the store of value function of money. The speculator holds cash balances in order to make speculative gains from investment in securities. According to Keynes, investors make capital gains by speculating in securities or bonds. The speculative demand for money depends upon the rate of interest. The demand for speculative cash balances is inversely related to the rate of interest. When people expect the prices of income yielding assets such as bonds to fall, the speculative demand for money rises and vice versa. Symbolically, the speculative demand for money can be stated as follows

$$L_2 = f(i)$$

Where; L_2 = Speculative demand for money.

I = Rate of interest.

The opposite relationship between rate of interest and speculative demand for money is shown in Fig.3.2 below:

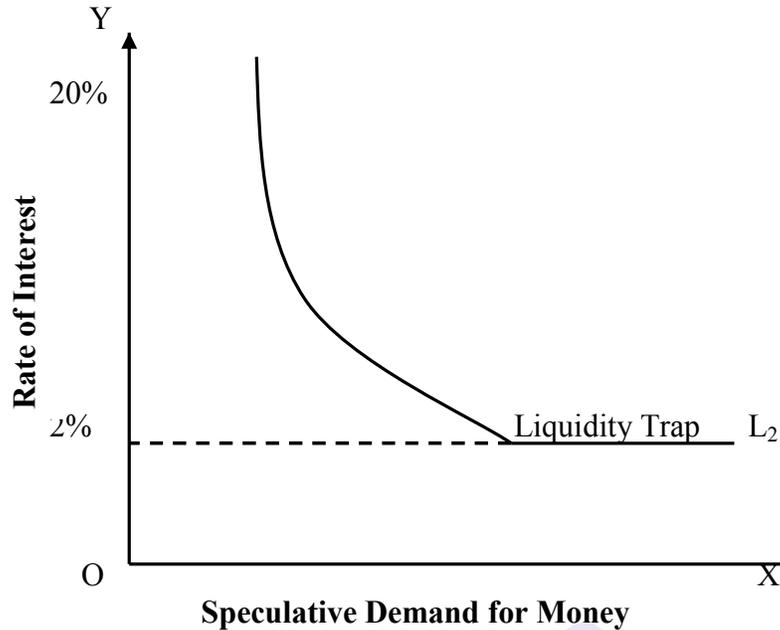


Fig. 3.2: Demand for Idle Cash Balances

You will notice that the speculative demand for money is inversely related to the rate of interest. When the rate of interest falls, the speculative demand for money rises and vice versa. Speculative demand for money is therefore highly interest elastic. However, at a very low interest rate, the speculative demand for money becomes perfectly elastic i.e., the entire income is held in the form of idle cash balances. This is due to the fact that bond prices and interest rates move in opposite directions. When the interest rate rises, the bond or security prices fall and vice versa. The speculative demand for money is also income determining and not income determined as in the case of transaction and precautionary demand for money. When the interest rate is expected to rise, people prefer to hold cash balances at the current interest rate so that they can take advantage of a rise in interest rate in the future. When speculative demand for money is rising, it indicates a greater preference for liquidity.

The Concept of Liquidity Trap:

At a very low rate of interest, the speculative demand for money is perfectly elastic i.e., the entire income is held by people in the form of cash balances for speculative purposes. In the situation of liquidity trap, percentage change in the demand for money in response to a percentage change in the rate of interest is equal to infinity. Symbolically, the liquidity trap situation can be stated as follows:

$$\frac{\Delta M}{M} \times \frac{i}{\Delta i} = \alpha$$

You will notice that the L₂ curve in Fig.5.2 shows the liquidity preference under the speculative motive at different rates of interest. At a very high interest rate of 20%, the speculative demand for money is very low and vice versa. However, when the interest rate is only 2%, the speculative demand for money becomes perfectly elastic. At this point, any increase

in money supply or income will be held by the people in the form of idle cash balances. In the diagram, the liquidity trap situation is shown by highlighting the horizontal segment of the liquidity preference curve. The liquidity trap situation arises because at very low rate of interest, the opportunity cost of holding cash balances is negligible and that in future the opportunity cost of holding cash balances is expected to rise.

Aggregate Demand for Money:

The aggregate or total demand for money is the sum of transaction, precautionary and speculative demands for money. Symbolically, the aggregate demand for money can be stated as follows:

$$L=L_1 + L_2$$

Where; L=Aggregate demand for money.

The functional relationship between aggregate demand for money and the determining variables: nominal level of aggregate income and the rate of interest can be stated as follows:

$$L=f(Y, i)$$

The liquidity preference schedule of a community can be obtained by superimposing the L_1 curves at each level of income on the L_2 curves. The liquidity preference schedule of a community is shown in Fig.3.3 below.

In Fig.3.3, Panel (A) shows the schedule of active balances (the sum of transaction and precautionary demand for money) held by people at different levels of income. The demand for active balances is perfectly inelastic to changes in interest rate in the short run and changes proportionately to the changes in the level of income. Accordingly, L_1 (Y_1) shows the demand for active cash balances at Y_1 level of income and so on and so forth. The L_1 curves are vertically sloping because they are interest-inelastic. In Panel (B), the L_2 curves shows demand for idle cash balances or speculative demand for money. You will recall that speculative demand for money is interest-elastic and inversely related to the rate of interest. Hence the L_2 curve is downward sloping. However, at a very low rate of interest, it becomes horizontal indicating that the entire income is held in the form of idle cash balances. In Panel (C), the liquidity preference curve indicating total demand for money is shown. It is the result of super-imposition of the L_1 curves on the L_2 curves. Accordingly, the curves $L(Y_1)$, $L(Y_2)$ and $L(Y_3)$ are obtained and they represent the liquidity preference schedules of the community at various levels of interest rates and national income.

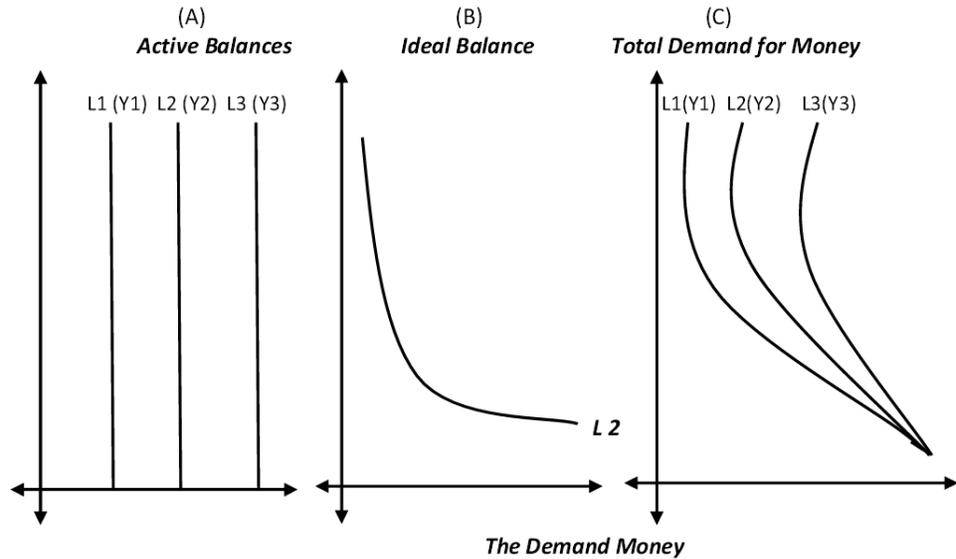


Fig. 3.3: Total Demand for Money

THE LIQUIDITY PREFERENCE THEORY OF INTEREST

3.8 THE LIQUIDITY PREFERENCE THEORY OF INTEREST

According to Keynes, the rate of interest is determined by the demand for and supply of money. Interest is the reward for lending liquidity or temporarily giving up cash balances held by the people. Symbolically, the rate of interest can be stated as follows:

$$R_i = f(D_M, S_M)$$

Where, R_i = Rate of interest.

D_M = Demand for money, and

S_M = Supply of money.

The demand for money can be expressed in the form of a liquidity preference schedule. Further, the demand for money as stated earlier is the sum of demand for active and idle cash balances. While the demand for active cash balances is determined by the transaction and precautionary motives, the demand for idle cash balances is determined by speculative motive. There is a direct relationship with the demand for active cash balances and the level of income. Whereas, the demand for idle cash balances is inversely related to the rate of interest. The total demand for money can be symbolically stated as follows:

$$L = L_1 + L_2$$

Where; L = Aggregate demand for money.

L_1 = Demand for active cash balances.

L_2 = Demand for idle cash balances.

The total demand for money can therefore be symbolically re-stated as follows:

$$L = f(r, y)$$

Where L = Aggregate demand for money.

r = Rate of interest.

y = Level of national income.

DETERMINATION OF THE RATE OF INTEREST:

The equilibrium rate of interest is determined by the intersection between the demand curve for and supply curve of money. The supply of money is determined and controlled by the monetary authority and the banking system. At any time, the stock of money is fixed. The supply of money is a stock rather than a flow. Hence, it is represented by a vertical straight line. The money held by all the people in the country is the total supply of money held as shown in Figure 3.4. In this figure, OM is the supply of money. SM is the vertical supply curve of money and LP is the demand or liquidity preference curve. They intersect with each other at point E. EM or OR is the equilibrium rate of interest. It shows that the demand for money is exactly equal to the supply of money. Any change in the demand or supply of money will bring about a change in the rate of interest. If the supply of money alone increases, the equilibrium rate of interest would fall and vice versa. This is shown in Figure 5.5. It can be seen in this figure that the original equilibrium rate of interest is OR. The original supply of money is OM. When the supply of money alone increases to OM₁, the equilibrium rate of interest would fall to OR₁ and vice versa. On the supply side, the rate of interest is influenced by the supply of money. By controlling the supply of money, the monetary authority can influence the rate of interest and the liquidity preference.

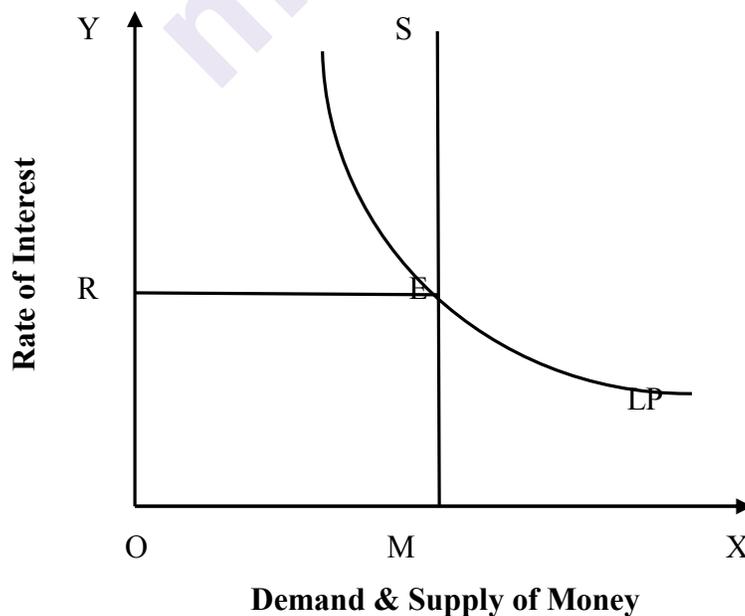
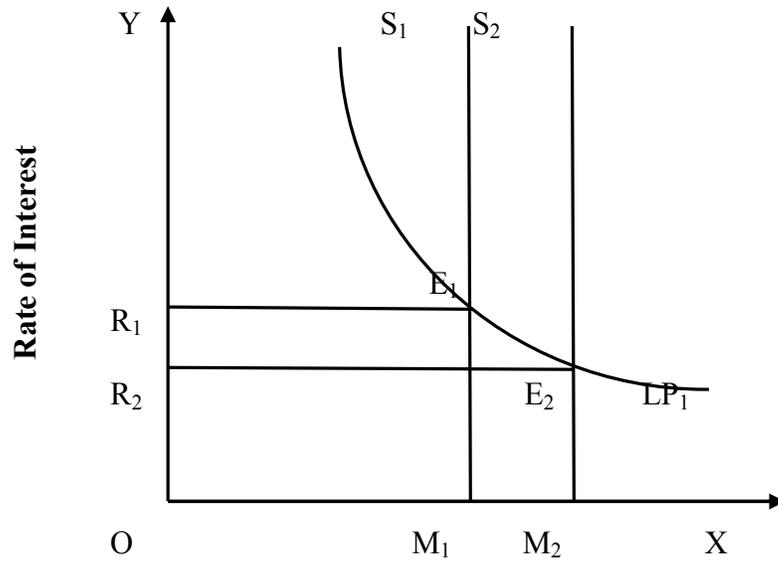
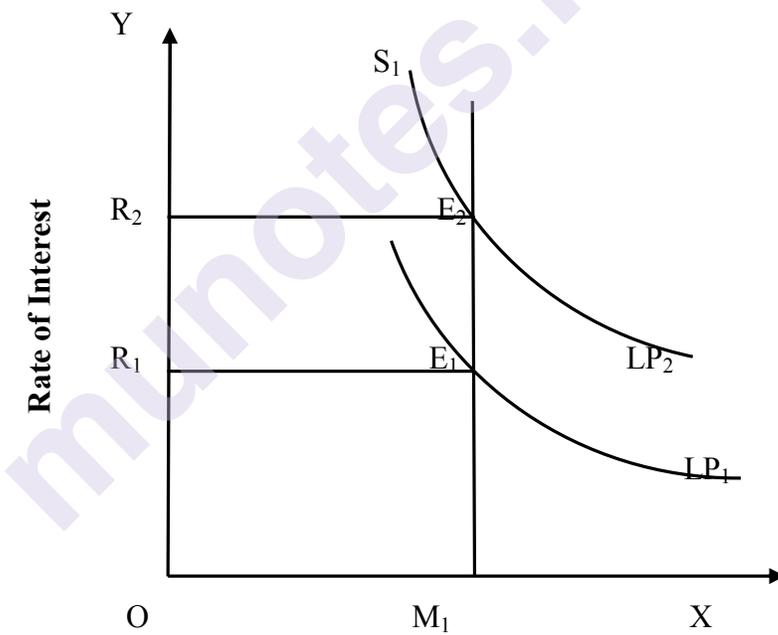


Fig. 3.4 – Determination of Interest Rate



Demand & Supply of Money

Fig. 3.5 (A) – Changes in the Rate of Interest



Demand & Supply of Money

Fig. 3.5 (B) – Changes in the Rate of Interest

CRITICAL ANALYSIS OF THE LP THEORY OF INTEREST:

The Keynesian theory of interest has been criticized by Hansen, Robertson, Knight, Hazlitt, Hutt and others. The following are the main criticisms:

- 1. The theory lacks in realism and comprehensiveness:** Speculative demand for money is the most important component which determines interest rate according to Keynes. The theory assumes that people will hold more money by selling bonds when the rate of interest falls and

hold less cash but more bonds in the case of the rise in the interest rate. However, Robertson does not regard bonds as the only alternative to money. The theory is therefore not realistic and lacks comprehensiveness.

2. **Methodologically Inadequate:** A change in the quantity of money would tend to change the price of the good in the same proportion but not the price of bonds. There is no functional relationship between the price level and the rate of interest. Monetary changes do not have direct or lasting effect on the rate of interest. By assuming a functional relationship between the quantity of money and the rate of interest, the Keynesian theory is found to be methodologically inadequate.
3. **Only Speculative Demand for money is considered to be rewarding:** Keynes believed that money held as a store of wealth does not bear any fruit whereas money held for speculative purpose yields rate of interest as a reward. According to WH Hutt, money is as productive as all other assets and the demand for money assets is a demand for productive resources.
4. **Saving is Essential for Liquidity:** Keynes believed that the rate of interest is the reward for parting with liquidity and not for saving. Saving is essential for making investments. According to Viner, "Without saving there can be no liquidity to surrender. The rate of interest is the return for saving without liquidity".
5. **Liquidity Trap does not exist:** In reality the liquidity preference schedule may be perfectly inelastic at a low rate of interest. It is wrong to assume that people will expect the rate of interest to go up in a depression.
6. **Incomplete Theory:** Hicks, Hansen, Somers, Lerner and others says that the rate of interest along with the level of income is determined by four factors, namely: the investment demand function or MEC, the saving function or the consumption function, the liquidity preference function and the quantity of money function. Keynes did not bring all these factors in his interest theory and therefore failed to provide an integrated and determinate theory of interest.

3.9 FRIEDMAN'S THEORY OF DEMAND FOR MONEY

According to Milton Friedman who restated the quantity theory of money and prices there are four determinants of demand for money (i) the level of prices (ii) the level of real income and output (iii) the rate of interest (iv) rate of change in general price level.

Friedman Classifies the holders of money into (a) ultimate wealth holders (b) business enterprises His theory is relevant to the ultimate wealth holders

Friedman has given a very broad concept of wealth which includes all sources of income or services. According to Friedman, the demand for

money is a demand for capital asset since money like capital assets provides services and returns. Bonds are monetary assets in which the people can hold their wealth and enjoy fixed interest income. The return on bonds is the sum of the coupon rate of interest and the anticipated capital gains or losses due to the expected change in the market rates of the interest. People can also hold their wealth in the form of equity shares and enjoy returns in the form of dividend income and capital gains or losses. Milton Friedman gave his demand function in the following manner:

$$M_d = f(w, h, r_m, r_b, r_e, P, u)$$

This is the nominal money demand function. The demand for real money balances can be derived by dividing the nominal money demand by the price level:

$$M_d = f(w, h, r_m, r_b, r_e, P, u)$$

Where $M_d =$ demand for real money balances.

w = wealth of the individual

h = the proportion of human wealth to the total wealth held by the individuals

r_m = the rate of return on money or interest

r_b = the rate of interest on bonds

r_e = the rate of return on equity shares

p = the price level

u = Institutional factors.

The simplified version of Friedman's demand function for money can be written as,

$$M_d = f(r, Y_p, u)$$

The demand-function of Friedman, though it looks similar to Keynes equation is different from Keynes in some ways :-

- (1) Keynes gave importance to current income whereas Friedman gave importance to wealth
- (2) Friedman's theory does not consider unstable elements like the Keynes speculative demand for money
- (3) Friedman did not consider the possibility of a liquidity trap situation.

Check Your Progress :

1. What is the Keynesian approach to demand for money?
2. Explain the concept of Liquidity trap.
3. What are the Friedman's determinants of demand for money?

3.10 SUMMARY

1. Money supply refers to the amount of money which is in circulation in an economy at any given time. It is the total stock of money held by the people consisting of individuals, firms, State and its constituent bodies except the State treasury, Central Bank and Commercial Banks.
2. The velocity of circulation of money determines the flow of money supply in an economy in a given period of time, normally such a period is one year. The average number of times a unit of money changes hands is known as the velocity of circulation of money. The supply of money in a given period is obtained by multiplying the money in circulation with the coefficient of velocity of circulation i.e., $M \times V$ where M refers to the total amount of money in circulation and V refer to the velocity of circulation of money in the given period.
3. Money is defined in Economics as ‘anything that is generally accepted in payment for goods and services as a medium of exchange.’
4. According to Keynes, people hold cash balances on account of three reasons or motives. Accordingly the demand for money can be separated into three parts namely transaction demand, precautionary demand and speculative demand for money. The total demand for money or cash balances can be divided into two namely; active and idle cash balances.
5. According to Keynes, the rate of interest is determined by the demand for and supply of money. Interest is the reward for lending liquidity or temporarily giving up cash balances held by the people. Symbolically, the rate of interest can be stated as follows:

$$R_i = f(DM, SM)$$

According to Milton Friedman who restated the quantity theory of money and prices there are four determinants of demand for money (i) the level of prices (ii) the level of real income and output (iii) the rate of interest (iv) rate of change in general price level.

3.11 QUESTIONS

1. Explain the meaning and constituents of money supply.
2. What are the factors affecting velocity of circulation of money?
3. Discuss Keynesian approach to demand for money.
4. Critically analyze Keynesian Liquidity Preference theory of rate of interest.
5. Explain Friedman’s approach to demand for money.



MONEY AND PRICES AND INFLATION-II

Unit Structure :

- 4.0 Objectives
- 4.1 Introduction
- 4.2 The Classical Approach to Demand for Money
- 4.3 The Fisher's Approach to Demand for Money
- 4.4 The Neo-Classical or Cambridge Approach to Demand for Money
- 4.5 The Keynesian Approach of Demand for Money
- 4.6 Meaning of Inflation
- 4.7 Demand Pull, Cost Push and Structural Inflation
- 4.8 Causes of Inflation
- 4.9 Effect of Inflation
- 4.10 Measures to Control Inflation
- 4.11 Summary
- 4.12 Questions

4.0 OBJECTIVES

- To study classical approach to demand for money
- To study Fisher's equation of exchange
- To study Cambridge approach to demand for money
- To understand the meaning and types of inflation
- To study various causes of inflation
- To understand various effects of inflation
- To know the measures to control inflation

4.1 INTRODUCTION

As against the Keynesian and Friedman's approach to demand for money in previous unit, the views of Classical economists and Cambridge economists to demand for money is explained in this unit. The meaning, types, causes, effects and measures to inflation in an economy is explained in detail.

4.2 THE CLASSICAL APPROACH TO DEMAND FOR MONEY

The classical economists emphasized the medium of exchange function of money. According to the classical economists like J.S. Mill, David Hume and Irving Fisher, the demand for money arises since money facilitates the exchange of real goods and services among individuals. Hence money is demanded for buying and selling goods and services or for spending over a period of time. The classical economists believed that the demand for money depends on objective factors like the volume of exchange transactions of goods and services produced and supplied during a given period of time, the amount of money needed to buy the goods and services and by the velocity of circulation. Since the volume of goods and services changes from time to time, the demand for money also changes. The classical approach to the demand for money can be grouped into the Fisher's cash -- Transactions Approach and the Cambridge economists' cash-balances approach.

4.3 THE FISHER'S APPROACH TO DEMAND FOR MONEY

Irving Fisher's Equation of Exchange is one of the most prominent explanations which analyse the demand for money. According to Fisher, the demand for money means the amount of money to be held to undertake a given volume of transactions over a period of time. Fisher's equation of exchange is given as $MV = PT$, where M is the money supply, V the transaction velocity, T transactions and 'P' the price level. 'PT' in the equation represents the demand for money and MV stands for the supply of money. The demand for money (Md) is equal to (Ms). It means that the demand for money is equal to 'P' multiplied by 'T' over a period of time and divided by V. The demand for money depends on the amount of money which people have to hold in order to carry on a volume of transactions over a period of time. According to Fisher 'V' and 'T' are constant during the short period. As a result, the demand for money varies with changes in 'P'. According to Fisher the supply of money (Ms) is equal to demand for money (Md). It means that the demand for money is always equal to the supply of money. Fisher's version of demand for money stresses the role of money in spending and not saving. The demand for money changes in proportion to the changes in the price level. V also determines the demand for money.

4.4 THE NEO-CLASSICAL OR CAMBRIDGE APPROACH TO DEMAND FOR MONEY :

The Cambridge approach or the cash balances approach was given by Marshall, Pigou, Robertson and Keynes. These economists stressed the store of value function of money. This approach concentrates on what individual want to hold for satisfying the transaction motive and precautionary motive. According to this approach, the demand for

money refers to the cash balances held by all individuals in an economy. The following factors influence the decisions of individuals in holding cash.

- (i) The prevailing prices of goods and services and the expected changes.
- (ii) The existing interest rates and expected changes in future.
- (iii) The wealth in the hands of the people.

These factors remain constant according to the Cambridge economists. The total demand for money or cash balances is a certain proportion of national income. The demand for money can be expressed as, $M_d = KPY$, where M_d is the demand for money, K is the constant proportion of income Y . It is the proportion of national income which people desire to keep in the form of cash balances and P_y is the nominal national income. According to the Cambridge economists the demand for money is the constant proportion (K) of Y . Wherever there is a change in the price level or in the real national income, the demand for money also changes in equal proportion. For example if M_d is Rs. 2000 crores and the money income is Rs 6000 crores per year $K = 1/3$ per year. This implies that on an average the public likes to hold money amounting to $1/3$ of the annual income.

Check Your Progress :

1. Distinguish between Cash transaction and Cash balance approach to demand for money.

4.5 THE KEYNESIAN APPROACH OF DEMAND FOR MONEY

J M Keynes introduces his theory on the demand for money through his book titled, the "General Theory of Employment, Interest and Money" in 1936. According to Keynes money was demanded due to three main motives i.e. the transactions motive, the precautionary motive and the speculative motive. The speculative motive of demand for money is a special contribution of Keynes.

(i) The transaction motive :

It refers to the transaction demand for money as a medium of exchange for carrying on current trade and business transactions. Money is demanded for transaction purposes since it is received at discrete intervals of time and expenditure goes on continuously. Keynes classified the transactions motive into (a) income motive and (b) business motive.

(a) The income motive :

People hold cash to bridge the gap between the receipt of income and expenditure. The income in the form of salary or wages is recovered at a certain time like once in a week or once in a month. But expenditure goes on throughout all the time. To meet day-to-day expenditure a part

of the income has to be held in the form of liquid cash. The following factors decide the amount of money held by people:

- (i) **Level of Income** As the level of income increases, the transaction demand for money of the individual will increase and vice versa.
- (ii) **Tune Interval:** The longer the time interval between the receipt of income and expenditure, the higher the amount of money held by people for transaction purposes.
- (iii) **The standard of Living :** The higher standard of living, the larger the amount of money held and vice versa.

(b) The business Motive :

The businessmen and the firms also hold cash balance in order to bridge the interval between the time of incurring business costs or expenses and the receipt of the sale proceeds. The larger the volume of turnover or transactions for the business firms, the greater will be the amount of money held for this purpose. The amount of money held by the business firms depends on the size of their income and their turnover. The aggregate demand for money for satisfying the transaction motive is the sum total of the individuals demand for cash as well as the individual firm's demand for cash. This aggregate demand for money will depend upon total size of national income, the level employment and the price level.

The transactions demand for money primarily depends on the level of income. The transaction demand for money which is income-elastic can be expressed in the following manner.

$L = (fy)$ where L_t with transaction demand for money, T stands for function of and y stands for the national income. The figure below shows the transaction demand for money.

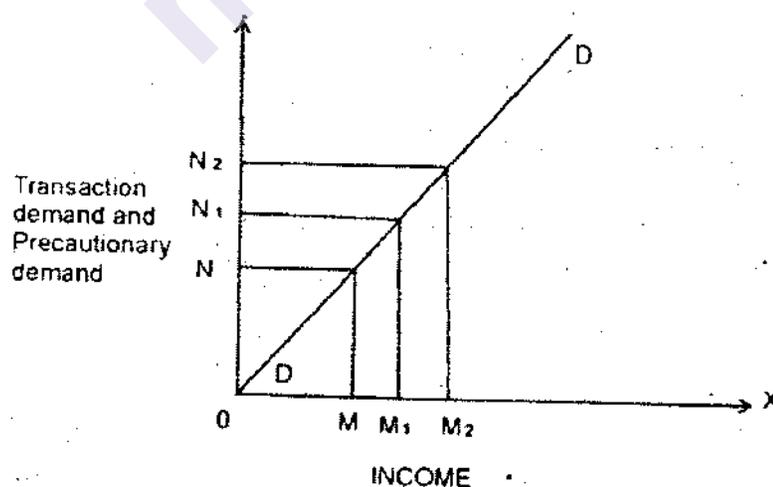


Figure 4.1

In the above figure, dd is rising indicating that, with the increase in national income, the demand for money for transaction purposes also rises,

(ii) The Precautionary Motive :

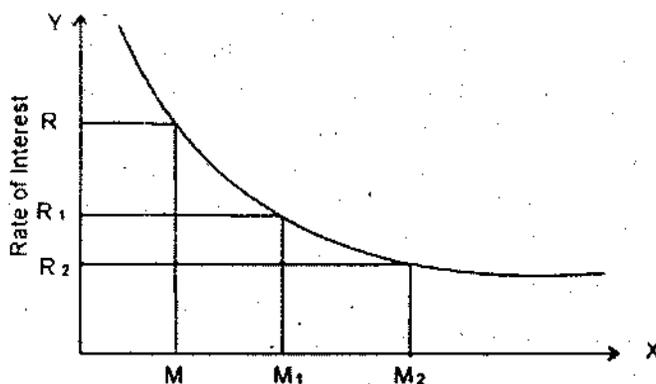
Besides the money kept also for transaction purposes, people hold additional amount of money to meet unexpected or unforeseen contingencies, emergencies or unexpected events. Money held for such precautions is known as precautionary motive. The accessibility of individuals and firms to the credit market determines the amount of money held for this purpose. If borrowing is easy or the assets of the people can be easily converted into cash, the amount of money held for this motive will be very low and vice versa. Uncertainty regarding future will make individuals and firms keep aside money for precaution purposes. The precautionary motive of demand for money depends on the income level i.e. $L = f(y)$, where ' L_p ' stands for precautionary motive, T a function of and y , the level of income,

(iii) Speculative motive :

People hold money as a store of wealth or liquid asset for investment and lending, with a view to make speculative gains. People speculate about the future prices of bonds or securities or future interest rates. People prefer to hold securities where prices are expected to rise in future and vice-versa. People make capital gains from speculative about the prices of bond or securities or future interest rates. According to Keynes. The speculations motive is the desire to earn profit by knowing better than the market what the future will bring forth. The individuals have to choose between holding money or other assets. Uncertainty regarding the behavior of the future interests and price of bonds leads to speculation. If the rate of interest is high and the prices of bonds are low, the lower will be liquidity preference. In such a case money will be lent or bonds will be purchased. There is an inverse relation between the prices of bonds and interest rate.

If the interest rate is expected to rise, or the prices of bonds to fall, people sell the bonds or assets and hold more cash. The people will buy the bonds when their prices actually fall. On the other hand, if the people expect the rate of interest to fall, or prices of bonds to rise, people will buy bonds whose prices are expected to go up. This leads to a fall in liquidity preference. This shows that speculative demand for money is interest elastic. –

$L = f(i)$ where. L_2 is the demand for money for speculative purpose, (i) the rate of interest



Liquidity preference (Speculative demand for money)
Figure 4.2

The above figure shows the inverse relation between the rate of interest and the speculative demand for money. It slopes downwards from left to right indicating that when the rate of interest is high, the demand for money is low and vice versa.

4.6 MEANING OF INFLATION

A sustained rise in the general price level over a period of time is known as inflation. Conversely, a sustained fall in the general price level would be known as deflation. Inflation is measured in terms of a price index. For instance in India, we have the wholesale price index (WPI) and the consumer price index (CPI). The Price Index is based on a basket of goods and services. Within a given basket, the prices of some goods and services may rise or fall. However, when there is a net increase the price of the basket, it is called inflation.

Inflation is a rate of change in the price level. The rate of change is measured with reference to the base year so that a long term perspective is obtained with regard to price rise. For all practical purposes, inflation rate is measured on yearly basis. However, in recent years, the inflation rate is also measured on monthly and weekly basis. The rate of inflation can be measured as: $P = [(P_1 - P_0) / P_0] \times 100$. For example, the price index based on the Wholesale Prices in India for the year 2003-04 was 180.3 and in 2004-05, it was 189.5. The rate of inflation for the year 2004-05 was 5.1 per cent. Inflation rate measured on the basis of wholesale price index (WPI) for the period 2005-06 to 2012-13 in India is given in Table 4.1.

Year	Wholesale Price Index	Inflation Rate (%) $P = [(P_1 - P_0) / P_0] \times 100$
2005-06	104.5	-
2006-07	111.4	$111.4 - 104.5 / 104.5 \times 100 = 6.6\%$
2007-08	116.6	$116.6 - 111.4 / 111.4 \times 100 = 4.6\%$
2008-09	126.0	$126.0 - 116.6 / 116.6 \times 100 = 4.06$
2009-10	130.8	$130.8 - 126.0 / 126.0 \times 100 = 3.80$
2010-11	143.3	$143.3 - 130.8 / 130.8 \times 100 = 9.55$
2011-12	156.1	$156.1 - 143.3 / 143.3 \times 100 = 4.93$
2012-13	164.8	$164.8 - 156.1 / 156.1 \times 100 = 5.57$

TYPES OF INFLATION BASED ON RATES OF INFLATION

On the basis of the rate of price rise, inflation is classified into five categories. They are **creeping or moderate inflation, walking, running, galloping and hyper inflation**. When the rate of price rise is less than three per cent per annum, it is called creeping inflation. An inflation rate of about three per cent per annum is considered creeping. When prices creep upwards at a moderate rate, inflation serves as an incentive to investment. As a result, the rate of investment, employment, output and aggregate demand rises in the economy and the economy moves into the prosperity phase.

When inflation rate crosses the three per cent mark and remains within single digits i.e. below the 10 per cent mark, it becomes walking inflation. Walking inflation leads to a much rapid fall in the purchasing power of money. However, the negative consequences of single digit inflation are not widely felt and hence it is considered within the tolerable limits. However, both monetary and fiscal policies are swung into action to control the rate of inflation and keep it within single digits.

When inflation rate is in double digits, it is known as running inflation. When prices begin to rise by more than 10 per cent per annum and the rate of inflation accelerates, money begins to flow away from productive activities into unproductive or speculative activities. As a result, the supply of goods and services fall in the economy and their prices begin to rise more rapidly. Thus commodity prices rise rapidly for want of investment and prices of gold, real estate and stocks rise more rapidly

because more and more money is diverted from the productive sector to the unproductive sector.

When prices rise by about 100 per cent annum, the situation is known as galloping inflation and when the inflation rate is over 1000 per cent a year, it is called hyper inflation. Both galloping and hyper inflation signals the collapse of the economy. Productive activity is at an all time low, people lose confidence in the currency and the economy looks like more of a barter economy. During world war one, countries like Austria, Hungary, Germany, Poland and Russia experienced hyper inflation. For instance between 1920-23, the German price index rose from one to one billion. In 1994, the inflation rate in Georgia was 15000 per cent per annum. **In 2008, the inflation rate in Zimbabwe was 11.2 million per cent.** In such situations, the paper on which money is printed become more valuable than the money itself i.e. the intrinsic value of even paper money becomes greater than the face value. Thus if you sell money by kilograms you may get more money in return than by exchanging money in the market for goods and services.

4.7 DEMAND PULL, COST PUSH AND STRUCTURAL INFLATION

Broadly speaking, there are three types of inflation which constitutes the causes of inflation. Demand side factors will cause demand pull inflation, supply side factors will cause cost push inflation and structural factors will cause structural inflation. Here in this section, we will analyze these three major types of inflation.

1. Demand -pull Inflation: Demand pull inflation takes place due to rise in aggregate demand. Aggregate demand may rise due to combined effect of higher demand from the various sectors of the economy such as the firms, households and the government. According to Keynes, inflation arises when there is an inflationary gap in the economy. Inflationary gap arises when aggregate demand is greater than aggregate supply at full employment level of output. Keynes explained inflation in terms of demand pull forces. When the economy is operating at the full employment level of output, supply cannot increase in response to increase in demand and hence prices rise.

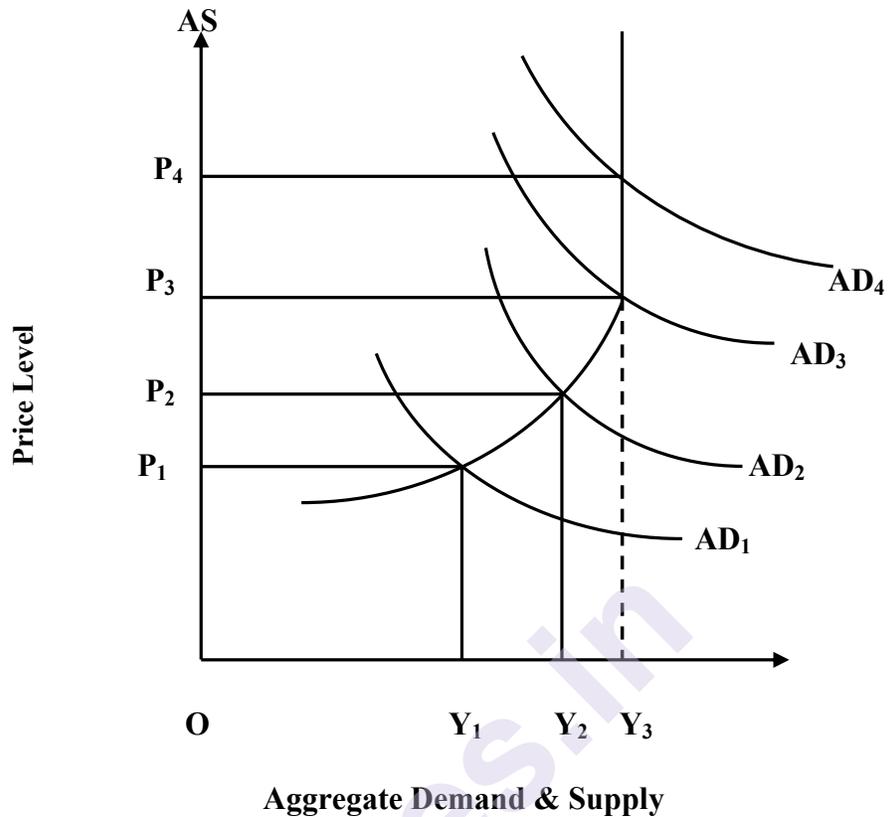


Fig. 4.3: Demand Pull Inflation

Demand pull inflation is depicted in Fig.4.3. You may note that aggregate demand and supply curves are measured along the X-axis and the general price level is measured along the Y-axis. The aggregate supply curve AS rises upward in the beginning and becomes vertical when full employment level of output is achieved at point OY_f . This is because the supply of output cannot be increased once full employment level of output is achieved. When the aggregate demand curve is AD_1 , the equilibrium is less than full employment level and the price level OP_1 is determined. When aggregate demand increases to AD_2 , the price level rises to OP_2 due to excess demand at price level OP_1 . Since the economy is operating at less than full employment level, the real sector of the economy responds to rise in prices and hence the output increases to OY_2 . When the aggregate demand further rises to AD_3 , the price level rises to OP_3 followed by increase in output to OY_f . When the aggregate demand further rises to AD_4 , the aggregate supply does not respond to remain constant at OY_f and only the price level rises to OP_4 . After the full employment level of output the aggregate supply curve becomes perfectly inelastic and parallel to the Y-axis.

2. Cost-push Inflation:

In the absence of rise in aggregate demand, prices may rise due to increase in cost in terms of higher wages, higher input costs and higher profits. These are known to be autonomous increases in costs. Inflation on account of rise in costs is known as Cost push inflation.

- a) **Wage-push Inflation:** Powerful trade unions may bargain for higher wages and also get it even when the cost of living has not changed or the general price level is constant and there is no change in the productivity of labor. When employers have no choice but to yield to the demands of the trade union, they may pass on the higher costs to the consumers by charging higher prices on the goods and services produced. Such a situation leads to Cost-push inflation. In case of Cost-push inflation, the aggregate demand curve shifts to the left leading to fall in output and rise in the price level. Cost push inflation is also known as stagflation. Cost-push inflation is depicted in Fig. 4.2
- b) **Profit-push Inflation:** Firms operating under imperfect market conditions such as monopoly, monopolistic and oligopoly markets may hike their profit margins either autonomously or through collusion. When prices rise on account of hike in profit margins, it is called profit-push inflation. Profit push inflation may lead to cost push inflation if the products are used as inputs by other firms. When prices of capital goods, intermediate goods and raw materials are increased to increase the profit margin by firms operating under imperfect competition and when these goods are used as inputs by other firms, the cost of production of these firms go up, thereby leading to cost push inflation.
- c) **Input Cost Inflation:** Supply shocks leading to rise in input costs is an important cause of input-cost inflation. For instance, the oil price shocks of 1970s. The sharp rise in world oil prices during 1973-75 and in 1979-80 created supply shocks and cost-push inflation. Recent increases in the prices of crude oil also caused the inflation rate to go up. For instance, the weekly inflation rate in India was 12.34% during the second week of September 2008 as a result of sharp increase in the international prices of crude oil to \$150 per barrel. The government of India took monetary and fiscal measures to bring down the prices. Fortunately, the crude oil prices also fell below the \$50 per barrel mark in January 2009 and the weekly inflation rate in India also fell down to 6.4 per cent from the high of 12.34 per cent in September 2004.
- d) In January 2009 and the weekly inflation rate in India also fell down to 6.4 per cent from the high of 12.34 per cent in September 2004.

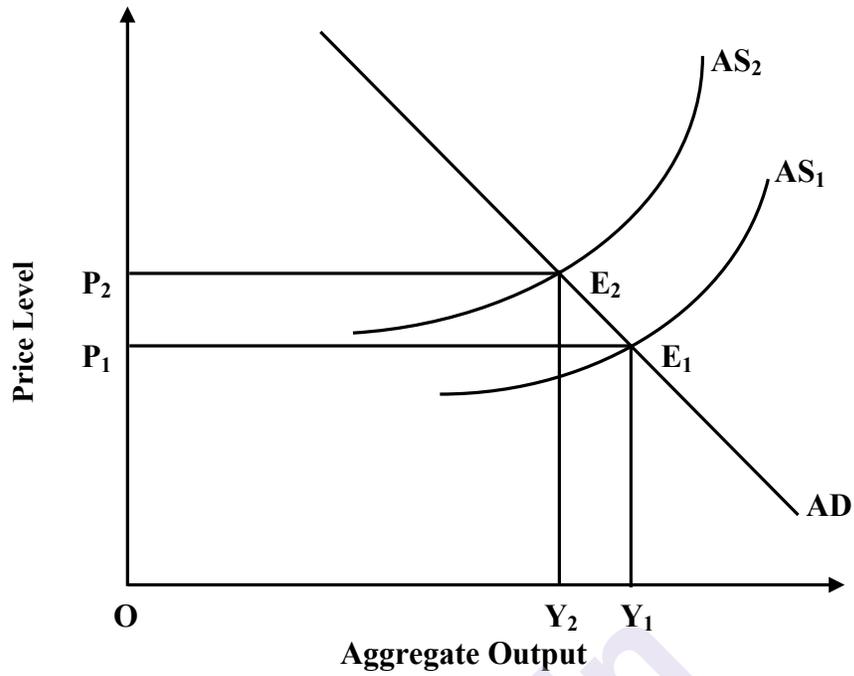


Fig. 4.4 Cost-push Inflation

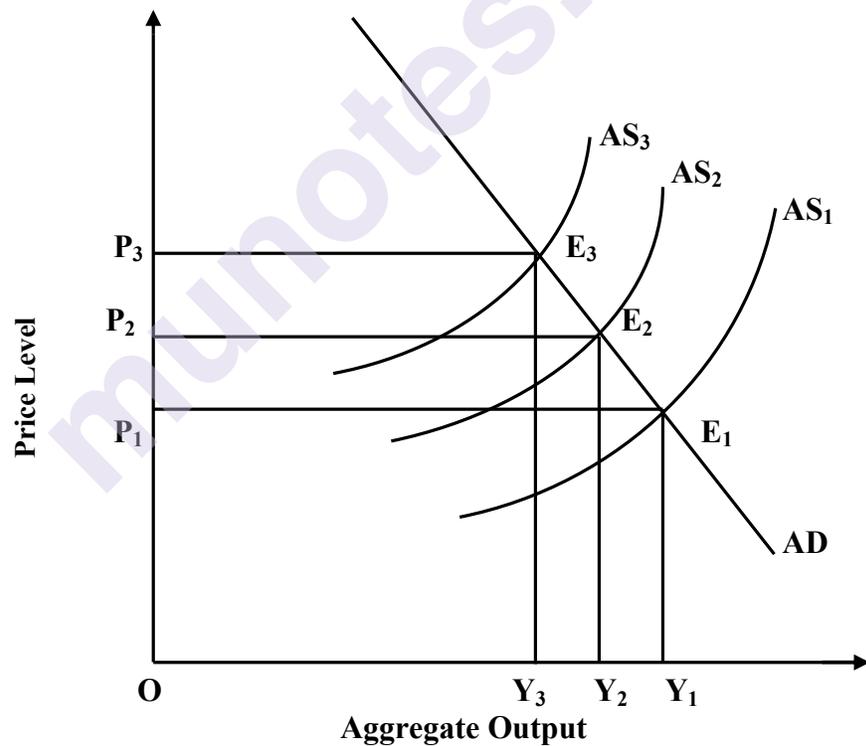


Fig. 4.5 Cost-push Inflation & Direct and Indirect

Effects of Supply Shocks

Cost push inflation as a result of rise in input prices is depicted in Fig. 4.4. Oil price shocks and rise in the price of other inputs have direct and indirect effects on the price level. When prices actually rise due to rise in input costs, the workers revise their price expectations upward. With upward price expectations, real wage rate declines and hence less labor is supplied at the given nominal wage rate. With the upward revision in the

expected price level, the aggregate supply curve shifts to the left. This is known as the indirect effect of an expected upward price revision. In Fig.4.5, you will notice that the AS_1 curve shifts to the left to AS_2 and the price level rises to P_2 on account of oil price shock. This is known as the direct effect of a rise in the input cost. Now that the price level has gone up, the workers will revise the expected price level to P_2 . This pushes the AS curve further left to AS_3 and further rise in price level to P_3 . The movement from AS_2 to AS_3 is known as the indirect effect of oil price shock.

4.8 CAUSES OF INFLATION

The causes of inflation are classified into two categories. They are demand side and supply side factors. These factors are discussed in this section.

Demand side Factors Causing Inflation:

Inflation is caused by a rise in aggregate demand over aggregate supply. Factors causing in aggregate demand over aggregate supply are as follows.

- 1. Increase in Public Expenditure:** Public expenditure has been increasing by leaps and bounds since the emergence of the Welfare State in the second half of the 20th century. Particularly in mixed economies with a pre-dominant public sector, the rise in public expenditure has been phenomenal. The interventionist role of the State has increased over time and the governments are seen to be responsible for building social and economic infrastructure.

For instance, Government expenditure has regularly increased in India. The Government expenditure in India has continuously increased since the beginning of economic planning. Rising government expenditure has been an important cause of inflation in India. The government or public expenditure was 15.3 per cent of GDP in 1960-61 and since then it has been on a continuous rise. In 1990-91, it was 31 per cent of the GDP. It further rose to 31.2 per cent in 2000-01. About 48% of the public expenditure in India is on non-developmental activities. Expenditure on defense, interest payments and governmental machinery constitutes non-developmental expenditure. Expanding governmental machinery, rising defense expenditure, expenditure on subsidies and growing public borrowing has contributed to the rise in non-developmental expenditure. While non-developmental expenditure increases aggregate demand in the economy, it does not increase aggregate supply and hence price rise.

- 2. Deficit Financing:** There is no surplus or even a balanced budget. Governments do not spend according to their incomes. Government budgets are always deficit budgets which means, government expenditure is always greater than income. Increasing fiscal deficit is a general feature of the government budgets of developing countries. In order to finance the budget deficit, governments take recourse to

public borrowing and also borrowing from their Central Banks. In order to raise resources for repaying public debt, governments may raise the existing tax rates or raise new taxes. Deficit financing leads to rise in public expenditure and hence rise in aggregate demand, thereby causing inflation.

For example, the expenditure of the government of India has been more than its income. The gap between expenditure and income or the deficit is filled through deficit financing. The deficit is financed by borrowing funds from the banking system. If the borrowed funds are used for unproductive purposes, they will give rise to inflation. The government of India has used the borrowed funds for non-developmental purposes in a careless manner. The fiscal deficit during the year 2002-03 was Rs.145072 crore and in the year 2007-08, it was Rs.150948 crore.

- 3. Increase in Money Supply:** Increase in money supply over and above the quantity of output produced in the economy would result in price rise. Irving Fisher's quantity theory of money explains how increase in money supply without a proportionate increase in output leads to rise in prices and fall in the value of money. Commenting on the effect of money supply on prices, Dr. C Rangarajan, former Governor of the Reserve Bank of India states that "Money has an impact on both output and price. The process of money creation is a process of credit creation. Money comes into existence because credit is given either to the government or the private sector or the foreign sector. Since credit facilitates the production process, it has favorable impact on output. But at the same time the increased money supply raises the demand with an upward pressure on prices". Dr. Rangarajan has therefore accepted the fact in India, price effect of money supply is greater than output effect.

If increase in money supply was the only reason for rising prices then the rise in prices should be equal to the difference between the increase in money supply and increase in output. In the Indian context, no such relationship is found between the increase in money supply and the inflation rate. For instance, the inflation rate in the year 2004-05 was 5.1 per cent and the excess of money supply over real GDP was only 4.8 per cent. Going by Irving Fisher's formula, the inflation rate must be equal to excess money supply. However, in the Indian context, the inflation rate was slightly higher than the excess money supply. In subsequent years, it is surprising to find that the inflation rate has been much lower than the excess of money supply over real GDP. Divergence between excess money supply and the inflation rate is brought out in Table 4.2. It clearly means that there are other factors also which lead to increase in prices.

Table 4.2**Comparison between Money Supply,
Real GDP and Inflation Rate in India**

Year	Increase in Money Supply M ₃ (%)	Change in GDP (%) at 1999-2000 Prices	Excess of Money Supply Over Real GDP (%)	Inflation Rate (WPI based)
2003-04	-			
2004-05	12.3	7.5	4.8	5.1
2005-06	17.0	9.4	7.6	4.1
2006-07	21.3	9.6	11.7	5.9
2007-08	22.4	4.7	13.7	4.1

Source: IES 2007-04.

4. **Corruption and Black Money:** Financial corruption leads to creation of black money. Corruption by public servants and ministers amounts to unearned income and leakages in the system. Any leakage in the flow of production would reduce the total quantity of output and increase in aggregate demand. Further unreported incomes or black money would also cause rise in prices. Although unreported incomes are not entirely unearned incomes, they do contribute to excessive consumption expenditure and therefore cause rise in prices.

According to Transparency International, India and Centre for Media Studies; India Corruption Report 2007, the below the poverty line households (BPL) in India paid a total bribe of Rs.8830 million to obtain public services in the year 2007. This amount is only the tip of the iceberg. Out of the 180 countries surveyed by Transparency International for corruption, India's rank was 74 with an index of 3.5 in the year 2006. An index of 10 indicates complete freedom from corruption and an index of zero indicates total corruption. Countries like Finland, Denmark and New Zealand with a CPI (corruption perception index) score of 9.4 were found to be least corrupt. Countries with a CPI score of less than five are considered to have serious problem. India is therefore one of the most seriously corrupted countries in the world. Myanmar and Somalia with a CPI score of two were the most corrupt countries of the world.

Supply Side Factors Causing Inflation:

Supply lags in the economy causes aggregate supply to fall short of aggregate demand and cause price rise. These supply side causes are as follows.

1. **Fluctuating Agricultural Growth:** The rate of growth of output of food grains must be equal to the rate of growth of demand for food grains. Demand for food grains increases due to rise in incomes and rise in population. In poor countries, the income elasticity of demand for food grains is high. In poor countries, the agricultural sector is under-developed and largely dependent on nature. Thus when the agricultural sector fails to produce adequate output, the prices of agricultural goods rise.

In the Indian context, population growth rate and the rate of growth of agricultural output has remained the same in the last twenty years. Indian agriculture is dependent on monsoons. Thus bad and poor monsoons mean crop failure and rise in food prices leading to rise in the general price level in the country. In the year 2004-05, food production fell by seven per cent. In the subsequent two years, food production was by 5.2 and 4.2 per cent but once again fell to 0.9 per cent in the year 2007-04. The growth in real national income was much higher than the rise in food production thereby causing the prices to rise.

2. **Hoarding of Essential Goods:** When the agricultural sector fails, food prices begin to rise more rapidly than non-food prices. The problem of food price rise is compounded by hoarding of agricultural goods by traders. Artificial scarcity is created by both whole-sellers and retailers. As a result, there is much greater increase in prices than what is justified by real shortages. In the Indian context, both the big farmers and agricultural traders indulge in hoarding of agricultural goods during the periods of crop failure. In times of food scarcity, hoarding of food grains and other food products only helps the prices to rise further.
3. **Inadequate Rise in Industrial Production:** In the prosperity phase of the business cycle, there is a sustained rise in investment demand which causes a sustained rise in demand for industrial goods. If the capital goods industry fails to respond to the rise in demand, the prices of industrial goods will rise and when the prices of industrial goods goes up, the prices of consumer goods also rise. In the Indian context, during the period 1995-96 to 2001-02, the industrial sector registered slow growth. Inadequate increase in industrial production has also been an important cause of inflation in India.

4.9 EFFECT OF INFLATION

EFFECT OF INFLATION ON PRODUCTION AND ECONOMIC GROWTH, DISTRIBUTION OF INCOME AND WEALTH AND CONSUMPTION AND ECONOMIC WELFARE

Inflation is a theft of income of the unprotected segments of the society. Inflation is therefore a crime against the poor who experience a fall in their real incomes during a period of sustained price rise. Inflation affects

the three most important functions of an economy namely; production, consumption and distribution in an adverse manner.

(A) Effect of Inflation on Production and Economic Growth:

In economies where labor is largely unorganized, single digit or creeping inflation will increase profitability and therefore lead to greater investment, employment, output, income, demand and prices. This is because the wages of unorganized labor is not indexed to inflation. The real wages of unorganized labor will always fall overtime during inflation whether anticipated or not. In the case of unanticipated inflation, the real wages of organized labor will also fall and may be compensated with a time lag. The firms will gain during the intervening period between unanticipated price rise and its compensation to labor. Thus from the point of view of production and economic growth, single digit inflation has a positive impact.

(B) Effect of Inflation on Distribution of Income and Wealth:

The impact of inflation with regard to distribution of income and wealth is not even on all sections of the society. In case of labor, the section that is protected from inflation is the organized labor whose wages and salaries are indexed to inflation. But unorganized labor is not protected from inflation and therefore their real incomes decrease on account of inflation. Similarly debtors who have borrowed money on fixed interest gain on account of inflation because real interest rate falls during a period of rising inflation while creditors lose because at times the real interest rate may be zero and even negative. Similarly people holding ownership capital like equity shares, balanced and growth funds make capital gains because of rising profits of business enterprises while people holding creditor capital like bonds, debentures, fixed deposits and income funds lose due to the fall in real interest rates. Broadly speaking, during an inflationary period, households lose and firms gain. Hence it is said that during inflation the rich become richer and poor become poorer.

(C) Effect of Inflation on Consumption and Economic Welfare:

Inflation is known as a poor man's tax. It reduces the purchasing power of money earned by the poor people and hence their economic welfare. The workers who do not get compensated for the increase in price rise, experience reduction in real incomes because their nominal income remains constant over a long period of time. Even those workers who get compensated for the price rise lose purchasing power during the intervening period between the rise in prices and the compensation in price rise. For instance, the Central and State Government employees in India get compensated for inflation twice in a year and there is always a lag of six months before such compensations are given. Economic welfare depends upon consumption of goods and services and during a period of sustained rise in prices, the people are able to consume less goods and services. As a result, there is a loss of economic welfare.

4.10 MEASURES TO CONTROL INFLATION

Inflation is the result of excess demand over the supply of goods and services. Inflation management, however, needs both demand and supply management as well. Both monetary and fiscal measures can be adopted to control inflation.

Attempt to control inflation in India was made for the first time in the early sixties after experiencing rapid rise in prices during the second five year plan. However, measures taken by the government were not effective to control inflation. Prices continued to rise throughout the planning era except the first five year plan. One of the important tasks of the government was to maintain price stability under the new economic policy. Accordingly, the government undertook various measures to control inflation in the country. These measures were as follows:

(A) MONETARY POLICY MEASURES:

The Central Bank's policy with regard to cost and availability of credit is known as monetary policy. The RBI can raise the rate of interest and increase the cost of credit and also reduce the availability of credit. Quantitative instruments of credit control such as the bank rate, the cash reserve ratio and the statutory liquidity ratio can be used to reduce aggregate demand in the economy. Increase in the bank rate by the RBI will increase the market interest rate in the country. This will reduce the demand for credit and further lead to reduction in aggregate demand. Similarly, if the CRR and SLR are increased, the banks will have less money at their disposal to give loans and advances to the borrowers. Monetary expansion due to rising foreign exchange reserves was controlled by sterilization of foreign exchange reserves. Commenting on the effect of money supply on prices, Dr. C Rangarajan, former Governor of the Reserve Bank of India states that "Money has an impact on both output and price. Since credit facilitates the production process, it has favorable impact on output. But at the same time the increased money supply raises the demand with an upward pressure on prices". **Dr. Rangarajan has therefore accepted the fact in India that price effect of money supply is greater than output effect.**

1. **The Bank Rate:** Bank rate is the rate at which Reserve Bank provides loans to the commercial banks in the country. It is also called the discount rate because the Central Bank provides finance to commercial banks by rediscounting bills of exchange. The bank rate in India was 10 per cent in the 1980s. It was raised to 12 per cent in October 1991. The bank rate was not a very effective in controlling money supply in the pre-reform period. However, in the post reform period, the bank rate has been made more effective and in keeping with the objective of low inflation and high economic growth, the bank rate was reduced to 6 per cent in April 1998 and it continued to be retained at 6 per cent until July 2010. The bank rate however went up to 9.5 % as on 29th March 2012 on account of inflationary pressures in the Indian economy. Thereafter, the bank rate was brought down to 4.25% in

view of recessionary trend in the Indian economy. However, due to sustained inflationary pressures, the bank rate was raised to 10.25% in July 2013.

2. **The Repo and Reverse Repo Rates:** The bank rate as a credit control instrument is losing importance. The repo and reverse repo rates are becoming important in deciding interest rate trends in the Indian economy. The Repo (sale and repurchase agreement) is a swap deal involving the immediate sale of securities and simultaneous purchase of those securities at a future date at a predetermined price. These swap deals take place between the RBI and financial institutions. The repo or the repurchase rate is the rate at which the Central Bank provides funds to banks. Continuing with its anti-inflationary monetary policy stance, between March, 2010 and April, 2011, the RBI has raised the policy rates six times. The repo rate was 5% in March 2010 and in April, 2011 the repo rate went up to 6.75%. The repo rate was further raised to 4.5 % on 25th October, 2011 on the occasion of the Second Quarter Review of the Monetary Policy for the year 2011-12. The reverse repo rate is the rate at which the Central Bank takes funds from banks and the reverse repo rate in March 2010 was 3.5% and in April, 2011 was 5.75 per cent. In October, 2011, the reverse repo rate was raised to 7.5 per cent. In June 2013, the repo rate was 7.25 and the reverse repo rate was 6.25%. Until July 2013, these rates have been retained by the RBI.
3. **Open Market Operations:** Open market operations means the buying and selling of securities by the central bank. The sale of securities leads to contraction of credit and purchase of securities lead to credit expansion. The RBI uses switch operations for buying and selling government securities. Switch operations involve purchase of one loan against sale of another. The use of switch operations prevents unrestricted increase in money supply. Recently, in January 2011, when the SLR was reduced from 25% to 24%, the RBI neutralized the excess liquidity through OMOs. The SLR was further reduced to 23% in the year 2012 and continues to remain at 23%. The RBI conducted Open Market Sales of Government of India Securities of Rs.12,000 crore on July 18, 2013. The RBI, however, could gain Rs. 2,532 crore from the auction, as rest of the bids received had quoted yield rates higher than acceptable to the RBI.
4. **The Cash Reserve Ratio:** The CRR is an effective instrument of credit control. It refers to the cash which the banks have to maintain with the Reserve Bank as a certain percentage of their demand and time liabilities. Changes in the CRR bring about changes in the loanable resources of the banks, particularly the commercial banks. In the late 1980s, there was a rapid growth in money supply and hence the CRR was raised from 10 per cent to 15 per cent. In the post reform period, the CRR was brought down according to the recommendation of the Narasimham Committee to below the 10 per cent level. However, in August 1994, the CRR was raised to 15 per cent to control the inflationary trends in the economy. Since then inflationary

pressures were reduced in the economy and accordingly the CRR was progressively reduced to 4.5 per cent in June 2003. The RBI had to increase the CRR to five per cent in October 2004 and further to 7.5 per cent in October 2007. In August 2008, the CRR was raised to nine per cent. As part of the anti-recessionary policy in the wake of global financial crisis of 2008-09, the CRR was reduced to five per cent in January, 2009. It was raised to 5.75 per cent in February, 2010 and further to six per cent in April 2010 as inflationary pressures started building in the economy on account of the huge fiscal stimulus that was given by the government in the aftermath of the financial crisis of 2008-09 and its negative impact on economic growth in India. In the first quarter review of the monetary policy for the year 2010-11, released in July 2010, the CRR was retained at 6 per cent by the RBI. Subsequently, the CRR was reduced to 4.75 per cent in March 2012 to ease liquidity conditions in the money market. In June 2013, the CRR was 4.0% and it continues to be 4 % in July 2013.

- 5. The Statutory Liquidity Ratio:** The Banking Regulation (Amendment) Act 1962 provides for maintaining a minimum SLR of 25% by the banks against their net demand and time liabilities. The SLR is fixed at 25% for co-operative banks, non-scheduled banks and the regional rural banks. In case of commercial banks, it can be raised to 40%. The RBI has used this instrument quite often during the 70s and 80s. In September 1990, the SLR was raised to 34.5 per cent and it remained at this level up to January 1993. This was done to control inflationary pressures and make larger resources available to the government. The Narasimham Committee recommended reduction of SLR to 25 per cent and accordingly the SLR was reduced to 25% in a phased manner in October, 1997. In November 2008, the SLR was further reduced to 24 per cent and in October, 2009, the SLR was restored to 25 per cent once again. However, in December 2010, the SLR was once again reduced to 24%. The SLR was further reduced to 23% in the year 2012 and continues to remain at 23%.

(B) FISCAL POLICY:

The fiscal policy of a country refers to the policy of the Government with regard to income and expenditure. Expansionary fiscal policy is adopted during the periods of economic stability or during the times of recession. In contrast, a tight fiscal policy is adopted when the economy is in the grip of inflation. In order to promote growth, the government may reduce both direct and indirect taxes and increase the level of aggregate demand. The government may also increase public expenditure to increase the level of aggregate demand and achieve a higher economic growth rate. However, in order to control inflation, the Government may raise taxes, add new taxes and reduce public expenditure by reducing the fiscal deficit.

The Government of India made attempts to remove fiscal imbalance from 1991-92 by bringing down fiscal deficit from 6.6 per cent to 4.7 per cent of GDP. However, in 1993-94 the fiscal deficit rose to 6.4 per cent. It was 5.9 per cent in 2001-02. In 2005-06, the fiscal deficit was brought

down to below the five percent mark. During the decade 1995-2005, the government has been able to keep the average inflation rate below the five per cent level. However, between 2005-06 and 2012-13, the government had failed to control inflation rate and fiscal deficit once again went up to 6.0 and 6.5 % in the years 2008-09 and 2009-10. The fiscal deficit during the year 2010-11 was Rs.3, 69,043crores and in the year 2011-012, it was Rs.4, 12,817crores. The budget for 2010-11 announced going back to fiscal consolidation and the projected fiscal deficit for 2010-11, 2011-12 and 2012-13 is 5.5%, 4.8% and 4.1 % respectively. The actual fiscal deficit figures in the years 2010-11 and 2011-12 were below the projected figures. However, fiscal deficit in 2008-09 and 2009-10, had gone up due to fiscal intervention made by the Government of India in the wake of the Global Financial Crisis. Near double digit inflation and a very high food price inflation in the last three years is the price paid by the people of India for the fiscal profligacy of the Government of India.

(C) SUPPLY SIDE MEASURES:

Inflation is the result of mismatch between aggregate demand and aggregate supply. Both monetary and fiscal policies can act on the demand and supply side through interest rates, money supply, taxation and public expenditure. However, some measures can directly influence the supply of goods and services. These measures are explained below.

1. **Public Distribution System:** The Public Distribution System was established in the country to provide essential consumer goods particularly to the poor people at low prices. The entire country is covered by this system. However, one cannot say that the system has been able to control price rise. The agricultural price support policy of the government has worked against the objective of price stability. As a result of faulty agricultural policy, food production in India had failed to keep pace with rising demand for food. The recently enacted Food Security Act by the Government of India promises cheap and heavily subsidized food for about 65 % of the population. It remains to be seen whether this measure will bring down food price inflation in the coming years.
2. **Import of Essential Commodities:** In order to improve the supply of essential commodities, the government of India had allowed food imports. During 1995-96, imports of edible oils, palmolein, sugar and pulses were allowed. The Food Corporation of India sold rice and wheat in the open market to control market prices of these food grains. Excise duties on a number of industrial products were reduced to improve the supply of manufactured goods.
3. **Capacity Utilization and Increase in Aggregate Supply:** The productive capacity of the economy should be fully utilized. Widespread unemployment can only lead to rising price level because the unemployed generates demand for goods and services without contributing to their production. The productive apparatus in the country consisting of farm lands, industries, services, forestry, fishing, mining etc must be fully

utilized. Under utilization of the potential and sometimes the actual productive capacity will lead to shortage of aggregate supply and hence price rise.

(D) INCOME POLICY:

Income freeze is an important policy measure to counter inflation. Here income freeze refers to inflationary income. Revision in wage rates on account of payment of dearness allowance to organized workers and revision in wage rates to all kind of workers due to rise in the cost of living is an example of wage push inflation. Factor incomes such as rent, wages, interest and profit should reflect the marginal productivity of the given factor. Policy that delinks factor incomes from the price level may help stabilizing the prices and may be the price level comes back to the original level in due course. However, the policy of freezing only wages will not be accepted by organized labor. The argument that wage rate must reflect the marginal productivity of labor is economically sound. But the same argument must be extended to other factors of production.

4.11 SUMMARY

1. The classical economists emphasized the medium of exchange function of money. According to the classical economists like J.S. Mill, David Hume and Irving Fisher, the demand for money arises since money facilitates the exchange of real goods and services among individuals. Hence money is demanded for buying and selling goods and services or for spending over a period of time. The classical economists believed that the demand for money depends on objective factors like the volume of exchange transactions of goods and services produced and supplied during a given period of time, the amount of money needed to buy the goods and services and by the velocity of circulation.
2. According to Fisher, the demand for money means the amount of money to be held to undertake a given volume of transactions over a period of time. Fisher's equation of exchange is given as $MV = PT$, where M is the money supply, V the transaction velocity, T transactions and P the price level. PT in the equation represents the demand for money and MV stands for the supply of money.
3. The Cambridge approach or the cash balances approach was given by Marshall, Pigou, Robertson and Keynes. These economists stressed the store of value function of money. This approach concentrates on what individual want to hold for satisfying the transaction motive and precautionary motive. According to this approach, the demand for money refers to the cash balances held by all individuals in an economy. The following factors influence the decisions of individuals in holding cash.

4. A sustained rise in the general price level over a period of time is known as inflation. Conversely, a sustained fall in the general price level would be known as deflation. Inflation is measured in terms of a price index.
5. Broadly speaking, there are three types of inflation which constitutes the causes of inflation. Demand side factors will cause demand pull inflation, supply side factors will cause cost push inflation and structural factors will cause structural inflation.
6. Inflation is the result of excess demand over the supply of goods and services. Inflation management, however, needs both demand and supply management as well. Both monetary and fiscal measures can be adopted to control inflation.

4.12 QUESTIONS

1. Explain Fisher's approach to demand for money.
2. Explain Cambridge approach to demand for money.
3. Discuss the meaning and types of inflation.
4. What are the causes of inflation?
5. Differentiate between demand pull and cost push inflation.
6. Discuss various effects of inflation.
7. What measures can be adopted to control inflation?



MEANING OF PUBLIC FINANCE

Unit structure:

- 5.0 Objectives
- 5.1 Meaning of Public Finance
- 5.2 Scope of Public Finance
- 5.3 Functions of Public Finance
- 5.4 The Role of Government in an Economy
- 5.5 Principle of maximum social advantage
- 5.6 Hugh Dalton's view of maximum social advantage
- 5.7 Richard Musgrave: Maximum welfare principle of budget determination
- 5.8 Limitations of the Principle Of Maximum Social Advantage
- 5.9 Summary
- 5.10 Questions

5.0 OBJECTIVES

- To know the meaning of public finance
- To understand the scope of public finance
- To understand the functions of public finance
- To understand the role of government in functioning of economy
- To know the principle of Public Finance
- To understand the Hugh Dalton Principle of Maximum social advantage
- To know the limitations of the principle of maximum social advantage

5.1 MEANING OF PUBLIC FINANCE

Public finance is the study of the role of the government in the economy. It is the branch of economics that assesses the government revenue and government expenditure of the public authorities and the adjustment of one or the other to achieve desirable effects and avoid undesirable ones.

Classical and neo-classical economists discussed public finance in the context of money raising and money spending activities of the government.

According to **Philip E. Taylor**, “**public finance deals with the finances of the government. The finances of the government include raising and disbursement of government funds**”.

According to **Ursula Hicks**, “**the main content of public finance consists of the examination and appraisal of the methods by which government bodies provide for the collective satisfaction of wants and secure necessary funds to carry out their purposes**”.

According to **Richard Musgrave**, “**public finance is concerned with the complex of problems that centre around the revenue – expenditure process of government**”. However, “**the basic problems are not issues of finance. They are not concerned with money, liquidity or capital markets. Rather, they are problems of source allocation, the distribution of income, full employment, price level stability and growth**”.

From the above definitions it is clear that the subject matter of public finance includes public revenue, public expenditure, public debt and financial administration.

Prof. Dalton in his book Principles of Public Finance states that “Public Finance is concerned with income and expenditure of public authorities and with the adjustment of one to the other”

From the above definitions it is clear that the subject matter of public finance includes public revenue, public expenditure, public debt and financial administration.

The classical and the neo-classical economists generally confined the study of public finance to the narrow area of government’s financial activities only. They also believed that government intervention in the economy should be kept minimal. Economics believed that public expenditure should be kept to the minimum and taxation should be limited to what is necessary to fulfill the basic public expenditure. Governments should follow **balanced budget** wherever possible.

It was **John Maynard Keynes**, in his **General Theory of Employment, Interest and Money** published in 1936, who for the first time emphasized

that the role of State needed to expand when the markets failed to correct themselves. He advocated that the financial or fiscal operations of the government can be used to remove distortions in the economy. The financial operations could be used to influence the level of aggregate demand and employment. The public budget could be used to mobilize resources for rapid growth, balanced development and social justice. These policies were successful in reviving US economy from the Great Depression and have been widely followed by most market economies since then, giving rise to the concept of **Functional Finance**.

5.2 SCOPE OF PUBLIC FINANCE

The scope of public finance is not just to study the composition of **public revenue and public expenditure**. It covers a full discussion of the influence of government fiscal operations on the level of overall activity, employment, prices and growth process of the economic system as a whole. The scope of public finance is extended to the following fiscal operational areas through the instrument of budget. The important areas are :

1. **Public Revenue** : It is the means for public expenditure. The necessity of raising the public revenue follows from the necessity of incurring public expenditure. Public revenue deals with the methods of raising income from tax and non-tax sources. In this connection we study the principles of taxation, incidence of taxation and the effects of taxation. Since tax revenue can be raised from both direct and indirect taxes, we also study the relative merits and demerits of direct and indirect taxes. Since non-tax revenues consist of surpluses of public enterprises, public borrowing and deficit financing, we also study about the methods of raising revenues through these sources.
2. **Public Expenditure** : It refers to the expenses of public authorities – central, state and local governments. Public expenditure is a major tool for implementing various policies of the government with respect to welfare, growth, stabilization and so on. Thus, public expenditure occupies an important place in the study of public finance. In this connection we study the principles of public expenditure, justification for various kinds of public expenditure and effects of public expenditure. We also study the changes in the pattern of public expenditure over the years.
3. **Public Debt** : With the increase in the activity of the state, the shortfalls in income of the state is frequently made up through loans. Thus, public debt has become an important source of revenue both in the developed and developing countries. In modern times, borrowing by the government has become a normal method of government finance along with the other sources of public finance. In all countries of the world, public debt has shown a tendency to increase. Thus, the study of public debt has become an integral part of public finance.

The problems relating to the raising and repayment of public loans are studied under this part of the public finance. In this connection we study about the sources of public loans, methods of raising the public loans, methods of repayment of principal amount of loan and interest, and burden of public debt.

4. **Financial Administration** : The scope and subject matter of public finance is not confined only to the study of public expenditure, public revenue and public debt. We also have to examine the mechanism by which these processes are carried out. In this context we are concerned with the organization and functioning of the government machinery which is responsible for carrying out the various functions. This is done by the government through the budget.

Thus, public finance involves the study of budget which is the financial plan of the government. The budget gives a complete picture of the estimated receipts and expenditure of the government during the year. In India the budget is divided into 2 parts, that is (i) Revenue budget and (ii) Capital budget. The revenue budget deals with the receipts from taxation, public enterprises, etc. and the expenditure incurred on the normal running of government departments and services, etc. On the other hand, capital budget deals with the capital receipts which include the market loans, borrowing by government from R.B.I. etc. The Capital expenditure is the expenditure incurred for the acquisition of assets like land, equipment, etc. for the development purposes.

5.3 FUNCTIONS OF PUBLIC FINANCE

The scope and functions of public finance has gone to many changes. The classical idea of sound Finance was no more popular.

At present all the governments through the budget and fiscal operations aim to discharge the following functions.

- (a) **Allocation of resources** : The most important objective of fiscal operations is to determine how the country's resources will be allocated to different sectors of the economy in order to achieve predetermined goals. Allocation of resources depends upon the collection of taxes and size and composition of government expenditure. The national budget determines how funds are allocated to different heads of expenses. The policy of public expenditure is used by the government to directly undertake resource allocation for different sectors. On the other hand, the government can use taxation and subsidies to indirectly influence resource allocation. The market mechanism cannot provide all goods and services for the satisfaction of collective wants through public goods like defence, justice and security. The government has to adjust between allocation of resources for the provision of public goods and private goods.

In India, the central government through its annual budget allocates expenditure to different sectors and sub-sectors. These sectors include the essential activities like defence, law and order, justice and other essential social activities such as education and health, as suggested by classical economists, but also various developmental activities connected to agriculture, industries and service sectors. Private investment is promoted or discouraged through positive and negative incentives.

- (b) **Distribution** : Fiscal operations can be effectively used to affect the distribution of national income and resources. Taxation and public expenditure policies are used by the government to reduce inequalities. Progressive direct taxes impose heavier burden on the rich than the poor. Public expenditure on social infrastructure and subsidies on food, housing, health and education help reduce income inequality.

India's direct tax system is progressive where tax rates range from 5 percent to 30 percent plus surcharge. The newly introduced Goods and Services Tax (GST) is also varies depending on the nature of goods and services. The GST ranges from 5 percent to **28 percent**. Essential goods and services are either exempted from the GST or taxed at a low percent. Through the budget, Government of India spends money to provide 'Food Security', health care and employment to the poorer sections of the society. The state governments too have introduced many welfare schemes to reduce the inequality of income.

- (c) **Stabilisation** : Developed economies expenditure business cycles. Economic stability implies absence of sharp cyclical movements in the form of booms and depressions. To bring about such stability, counter-cyclical fiscal operations are adopted. To counter depression and recession, government expenditure is increased to generate employment and taxes are reduced to encourage consumption and investment. During inflation, public expenditure is reduced and taxes are raised.

In 1930s depression, British economist Lord J.M. Keynes advised the USA government to use fiscal instruments to spend more to provide employment, thus more income in the hands of people leading more consumption and additional investment. The entire process was expected to revive economic activities and bring the economy out of depression. This approach led to the birth of the concept of functional finance.

5.4 THE ROLE OF GOVERNMENT IN AN ECONOMY

Two important concepts associated with public finance are (i) **fiscal policy**, and (ii) **budgetary policy**

- (i) **Fiscal policy** is the part of government policy that deals with raising revenue through taxation and other means and deciding on the level

and pattern of public expenditure. In most modern economies, the **government** deals with **fiscal policy** while the **central bank** is responsible for **monetary policy**. Fiscal policy is composed of tax policy, expenditure policy, investment or disinvestment strategies and public debt management.

- (ii) **Budgetary policy** refers to government's strategies to implement and manage a budget. It is a more specific policy than fiscal policy.

5.5 PRINCIPLE OF MAXIMUM SOCIAL ADVANTAGE

The principle of Maximum social advantage is the important Principle of Public Finance. It is the fundamental principle which should determine fiscal operations of the government. This principle is formulated and popularized by Dr. Hugh Dalton. The principle provides guidance to the Govt. regarding public revenue and public expenditure or public finance operations so as to maximise social advantage or welfare.

Budgetary activities of the government result in transfer of purchasing power within society. Taxation causes transfer of purchasing power from tax payers to the public authorities, while public expenditure results in transfers back from the public authorities to people. When the income tax is paid by an individual to the government he experiences **sacrifice or disutility**, and whenever in return government spends or it does expenditure by providing social benefit an individual receives **benefits or utility**.

Therefore, financial operations of the government cause sacrifice or disutility on one hand and benefits or utility on the other. This results in **changes in pattern of production, consumption and distribution of income and wealth**. It is important to consider whether these changes are **socially advantageous** or not. If they are socially advantageous, then the financial operations are justified, otherwise not. According to **Hugh Dalton, The best system of public finance is that which secures the maximum social advantage from the operations which it conducts**. The principle was developed by Hugh Dalton and was later interpreted by **Richard Musgrave**.

5.6 HUGH DALTON'S PRINCIPLE OF MAXIMUM SOCIAL ADVANTAGE

The Principle states: The state should collect revenue and spend the money so as to maximize the welfare of the people. When the state imposes taxes, some disutility is created. On the other hand, when the state spends some money, there is gain in utility. The state should so adjust revenue and expenditure that surplus of utility is maximised and disutility is minimised.

According to Dalton, the main objective of public finance is the maximization of social advantage and the principle he used to explain the achievement of this objective is the principle of **Maximum Social Advantage (MSA)**. The MSA is the fundamental principle on which public finance is based.

The principle of MSA is based on the following assumptions :

1. All taxes result in sacrifice and all public expenditures lead to benefits.
2. Public revenue consists of only taxes. No other source of income to the government is considered.
3. The government has only balanced budget, that is, revenue is equal to expenditure.
4. Public expenditure is subject to **diminishing marginal social benefit**.
5. Taxes are subject to **increasing marginal social sacrifice**.

The principle of MSA states that **public finance leads to maximum economic welfare when public expenditure and taxation are carried out up to that point where the benefits derived from the marginal utility of expenditure is equal to marginal disutility of the sacrifice imposed by taxation**. In other words, when marginal social benefit of government expenditure is equal to marginal social sacrifice of the taxation of social welfare is maximum.

Marginal Social Sacrifice (MSS)

Taxes cause sacrifice to people who have to give up some part of their income. The sacrifice that is experienced by the people when the government imposes an additional unit of taxation is known as the **marginal social sacrifice (MSS)**.

The marginal social sacrifice of taxation increases as the revenue collected by the government from taxes become larger. As the community pays more and more taxes to the government, the sacrifice they experience, in paying every **additional unit of money** in the form of tax increases. Thus taxes are subject to **increasing marginal social sacrifice**. This is based on the principle of **marginal utility**, according to which the less of a commodity (or money) an individual has, the more will be the disutility or sacrifice she will experience in parting with an additional unit of the commodity (or money).

The curve representing MSS is an upward rising curve. Taxes put a real burden on the people as either they have to cut down their consumption to pay taxes or they have to reduce their level of savings. As additional units of taxation are imposed on them, individuals are forced to cut more and more of their consumption and savings. Therefore, with each additional unit of taxation, the level of sacrifice also increases. As the government

imposes additional taxes to raise additional revenue the MSS curve is increasing an increasing rate due to increasing disutility or sacrifice incurred by the taxed people. Therefore, MSS curve rises upward from left to right

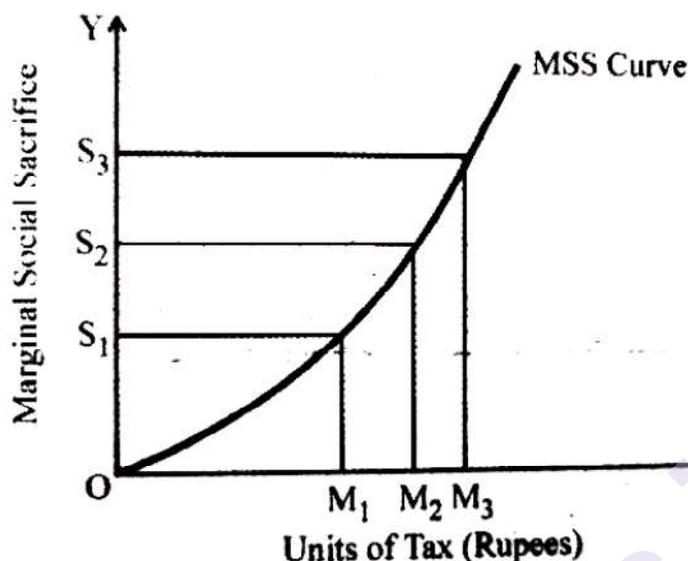


Figure 5.1 Increasing Marginal Social Sacrifice Curve

In Figure 5.1, when the amount of tax is OM_1 , the MSS imposed by taxation is OS_1 . When the tax rises to OM_2 , MSS rises to OS_2 , and as tax is further raised to OM_3 , MSS rises to OS_3 .

Marginal Social Benefit (MSB)

Public expenditure is carried out by the government to provide social goods like defence, justice system, free or subsidized food, housing and education, transport system and many other infrastructural facilities to the people. The primary objective of public expenditure is to generate welfare or benefits to the society.

While taxes result in sacrifice by the people, public expenditure results in benefits to them. All public expenditure, assuming they are wisely and productively spent by the government, result in some benefits. The benefit given to society, by an **additional unit of public expenditure** is known as **marginal social benefit (MSB)**.

MSB declines with increase in public expenditure, that is, with every additional unit of money spent by the government on the community, the social benefits tend to decline. In other words, the MSB or the marginal utility of public expenditure, like that of everything else, diminishes as the community has more of it. This is based on the principle of **diminishing marginal utility**. To a consumer, the marginal utility from a commodity declines as more and more units of the commodity are made available to him. In the same manner, the social benefit from each additional unit of public expenditure declines as more and more units of public expenditure

are spent. In the beginning, the units of public expenditure are spent on the most essential social activities. Subsequent increases in public expenditure are spent on less important social activities. As a result MSB from public expenditure declines with increase in volume of expenditure.

The curve representing MSB slopes downwards from left to right as shown in figure 5.2.

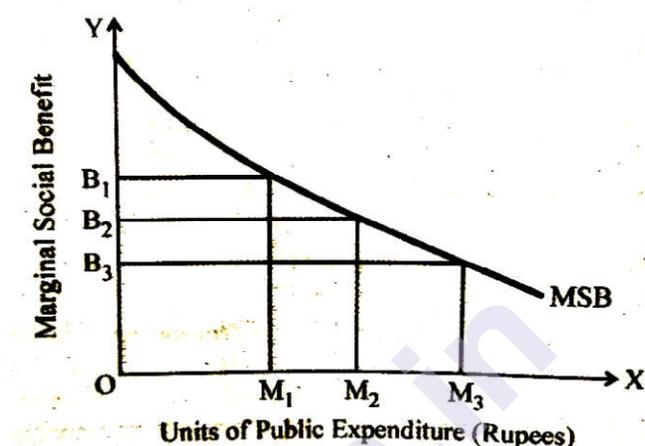


Fig. 5.2: Diminishing Marginal Social Benefit Curve

When public expenditure is OM_1 , MSB is OB_1 and when public expenditure rises to OM_2 , MSB falls to OB_2 . A further increase in public expenditure to OM_3 results in MSB falling to OB_3 .

Maximum Social Advantage

Social advantage is maximized at that level of taxation and public expenditure at which MSS is equal to MSB. Any other level of taxation and expenditure will achieve less than maximum social advantage.

The difference between the MSS and the MSB measures **net social advantage (NSA)**. As long as MSB is greater than MSS, NSA will be positive and will add to total social advantage. When MSS is equal to MSB, NSA is zero and maximum social advantage is achieved. When MSS is greater than MSB, NSA will be negative resulting in reduction in total social advantage.

Thus, as long as MSB is greater than MSS (and NSA is positive), the government should expand the level of taxation and public expenditure. It should stop its budgetary activities at the point where MSS is equal to MSB (and NSA is zero). Any further expansion in the level of taxation and public expenditure will result in MSS being greater than MSB (and negative NSA), and social advantage will reduce.

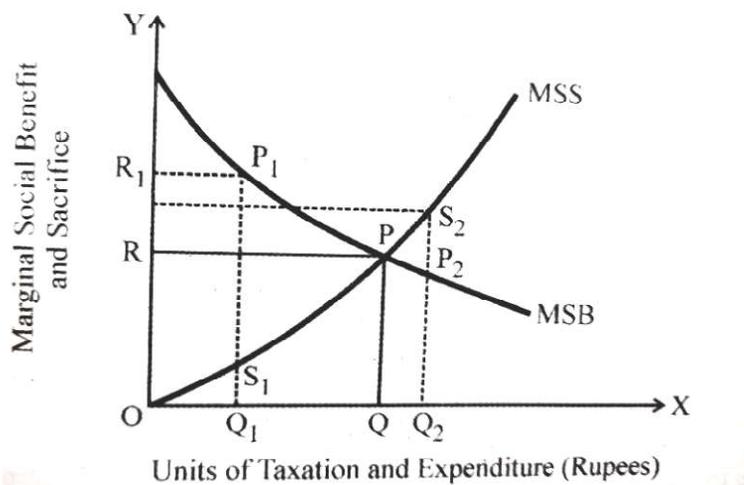


Fig. 5.3 : Maximum Social Advantage is obtained at the Point of Intersection of MSS and MSB Curves

In Fig. 5.3 the level of taxation and public expenditure (size of budget activities) is represented on the X-axis and MSS and MSB are represented on the Y-axis. **Social advantage is maximized at the point where the MSS curve cuts the MSB curve.** This is the point P in the Figure 5.3. Corresponding to P, on the X-axis, OQ represents that level of taxation and public expenditure at which the social advantage is maximum. Any other level of taxation and public expenditure will result in less than maximum social advantage. **This is the optimum budget size.**

Consider level OQ_1 on the X-axis. At this level of taxation and expenditure, MSB is P_1Q_1 and MSS is S_1Q_1 . Since MSB is greater than MSS, the government should increase the level of taxation and public expenditure. This is because, each additional unit of revenue raised through taxation and spent through public expenditure, will lead to an increase in **net social advantage**. This situation will continue as long as the levels of taxation and public expenditure are towards the left of the point P.

Once the level of taxation and public expenditure reaches OQ, MSS becomes equal to MSB and the point of **maximum social advantage** is reached.

Any further increase in the level of taxation and public expenditure will bring down the social advantage as subsequent units will add more to sacrifice than to benefits and NSA will become negative. For example, at point OQ_2 , MSS will be S_2Q_2 and MSB will be P_2Q_2 . Since MSS is greater than MSB, social advantage will reduce and the government should reduce the level of taxation and expenditure from OQ_2 to OQ to reach maximum social advantage.

Thus, **Maximum social advantage is achieved at the point where the marginal social benefit of public expenditure and the marginal social sacrifice of taxation are equated, that is $MSS = MSB$.**

5.7 RICHARD MUSGRAVE: MAXIMUM WELFARE PRINCIPLE OF BUDGET DETERMINATION

The principle of Maximum Social Advantage has been interpreted by economist Richard Musgrave who termed it as Maximum Welfare Principle of Budget Determination. According to Musgrave, the principle explains that taxation and public expenditure should be carried out up to that level where **satisfaction obtained from the last unit of money spent is equal to the sacrifice from the last unit of money taken in taxes**. In other words, it should be carried out up to the point where marginal social benefit is equal to marginal social sacrifice.

To illustrate his interpretation, Musgrave used Figure 5.4 in which, the size of the budget (level of taxation and public expenditure) is shown on the X-axis. On the positive part of Y-axis MSB is measured and on the negative part, MSS is measured.

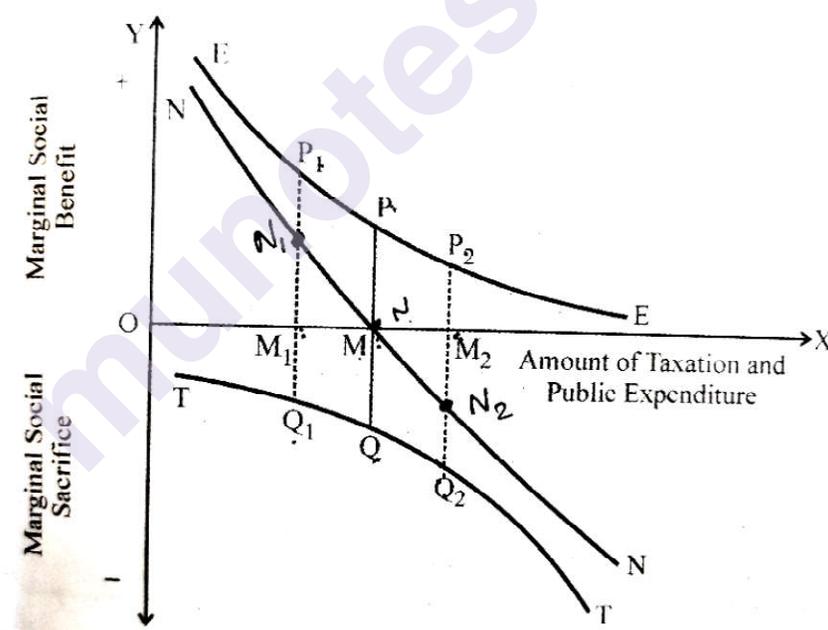


Fig. 5.4 : Gains and Losses from Budget Operation

The curve EE represents the **marginal social benefit (MSB)** of successive units of money spent as public expenditure, allocated optimally between different public uses. It falls from left to right because as public expenditure increases, MSB declines. The curve TT represents the **marginal social sacrifice (MSS)**. As additional units of taxation are raised from the people, MSS increases. Accordingly the curve TT slopes downwards from left to right in Fig. 5.4 showing rising MSS.

The curve NN measures **marginal net benefits (MNB)** which is derived from successive addition to public budget. MNB is calculated by deducting MSS from MSB. The vertical distance between EE curve and TT curve measures MNB at different sizes of the budget.

The **optimum size** of the budget is determined at OM, where **MNB is zero**. At this size of the budget, the marginal social benefit MP is equal the marginal social sacrifice MQ (**MSB = MSS**). Since MSB and MSS are measured in opposite directions, marginal net benefit is zero at M ($MSB - MSS = 0$). At this point the MNB curve NN cuts the X-axis.

At any point to the left of M, say M_1 MSB will be greater than MSS and MNB will be positive. It is beneficial to increase size of the budget as long as MNB is positive. So there will be a tendency to move from M_1 towards M. If the budget size exceeds M_1 , say M_2 , then MSS will exceed MSB and MNB will be negative. Therefore it will be beneficial for the government to cut down the size of the budget and move from M_2 towards M.

According to Musgrave **the optimum size of the budget is given by the point where the marginal net benefit is zero. This point corresponds to the point of maximum social advantage, as at this point MSB = MSS.**

5.8 LIMITATIONS OF THE PRINCIPLE OF MAXIMUM SOCIAL ADVANTAGE

The principle has been criticized on some fundamental grounds :

- (i) **Objective measurement not possible** : The principle of maximum social advantage is theoretically explained with the help of the marginal utility analysis. The marginal utility analysis. The marginal utility analysis itself is criticized because it is not possible to accurately measure utility or disutility experienced by people. The marginal benefits of public expenditure and the marginal disutility or sacrifice of public revenue are concepts whose objective measurement is extremely difficult. Besides, the terms “benefit” and “sacrifice” are vague and abstract. It is not possible to quantify them and find their exact implications.
- (ii) **Large budget size** : The financial operations of the government involve collection of large sums of money from taxation and other sources and the disbursement of large amounts by way of public expenditure. The effects of small additional amounts of these on the community are difficult to measure. Therefore, in practice, the public authorities are not in a position to estimate the marginal benefits and the marginal sacrifices. It is almost impossible to determine the particular size of budget that will maximize welfare of the community.
- (iii) **Unrealistic assumption** : It is unrealistic to assume that government expenditure is always beneficial and that every tax is a burden to society. For example, taxes on cigarettes or alcohol can provide benefit

to society, whereas taxes on education or essential commodities may harm general interest of society. Similarly, expenditure on social overheads like health care will give rise to social benefit whereas unnecessary increases in expenditure on defence may divert resources from productive activities causing loss of welfare to society.

- (iv) **Lack of disability** : In order to equate the marginal benefit from public expenditure with marginal sacrifice from taxation, government resources are required to be divided into smaller units. But it is not possible because of the lack of divisibility of public expenditure and taxes in small units.
- (v) **Ignores non-tax revenues** : This principle takes into consideration the sacrifice on the part of tax payers and ignores non-tax revenues. Non tax revenues like fines, fees, market borrowings, profits of public undertakings etc. are equally important as sources of revenue and in their effects on social benefit.
- (vi) **Changes in conditions** : Conditions in an economy are not static and are continuously changing. What might be considered as the point of maximum social advantage under some conditions may not be so under some other. For example, in times of war government expenditure and revenue must increase, and the increase is to the advantage of the community. What is optimum at one level of national income may not be so at a higher level. Therefore, it is difficult to determine the point of maximum social advantage and no definite volume of government expenditure and revenue can be considered as being the best.
- (vii) **Different periods** : The impact of many public projects is felt over the long period by both the present and the future generations. In order to determine maximum social advantage it becomes necessary to calculate social benefits from public expenditure in short period and in long period separately. It is not possible to equate marginal benefits of expenditures over projects relating to different time periods.
- (viii) **Non-economic implications** : Public authorities use the principle of maximum social advantage after carefully estimating the economic advantages and disadvantages of any proposed expenditure and taxation policy. They compare the balance of probable gain and loss to the community from various alternative proposed policies. Such estimates and comparisons are, however, not easy. They are difficult partly because all the possible results of a policy measure cannot be correctly visualized and because there are innumerable economic and non-economic implications of every single measure. Political and social criteria often put economic criteria in the background. There are various taxes and public expenditure measures, whose social and political impacts are far greater than their economic effects. It is not possible to objectively measure non-economic effects of public finance.

(ix) Conceptual differences : Taxes are paid by individuals and the sacrifice involved is felt at an individual or micro level. Whereas, public expenditure gives rise to public goods that are jointly consumed by all in a community. The benefits therefore are felt at a macro level. Many economists argue that it is neither possible nor desirable to compare micro and macro concepts by using the same criteria. Also, it is not possible to compare the marginal benefits accruing to people in one area from a given public expenditure with the marginal sacrifice underground by people who are taxed in some other area. Marginal sacrifice is a subjective concept. Marginal sacrifice of the same amounts of tax paid by two persons, having different living standard will be different.

5.9 SUMMARY

5. **Public finance** is the study of the role of the government in the economy. It is the branch of economics that assesses the government revenue and government expenditure of the public authorities and the adjustment of one or the other to achieve desirable effects and avoid undesirable ones.
2. The scope of public finance is not just to study the composition of **public revenue and public expenditure**. It covers a full discussion of the influence of government fiscal operations on the level of overall activity, employment, prices and growth process of the economic system as a whole.
3. All the governments through the budget and fiscal operations aim to discharge the functions of public finance.
4. Two important concepts associated with public finance are **(i) fiscal policy, and (ii) budgetary policy**
5. The principle of Maximum social advantage is the important Principle of Public Finance. It is the fundamental principle which should determine fiscal operations of the government. This principle is formulated and popularized by Dr. Hugh Dalton.
6. According to Dalton, the main objective of public finance is the maximization of social advantage and the principle he used to explain the achievement of this objective is the principle of **Maximum Social Advantage (MSA)**. The MSA is the fundamental principle on which public finance is based.
7. The principle of Maximum Social Advantage has been interpreted by economist Richard Musgrave who termed it as Maximum Welfare Principle of Budget Determination. According to Musgrave, the principle explains that taxation and public expenditure should be carried out up to that level where **satisfaction obtained from the last unit of money spent is equal to the sacrifice from the last unit of money taken in taxes**.

5.10 QUESTIONS

1. Discuss the meaning and scope of public finance.
2. Explain the various functions of public finance.
3. Explain the principle of Maximum Social Advantage as stated by Hugh Dalton.
4. Explain the limitation of Maximum Social Advantage.
5. Explain maximum welfare principle of budget determination.



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EFFICIENCY – MARKET- GOVERNMENT

Unit structure :

- 6.0 Objectives
- 6.1 Meaning of Efficiency
- 6.2 Concept of Consumer and Producer Surplus
- 6.3 Market
- 6.4 Market Failure
- 6.5 Public Goods
- 6.6 Role of Government
- 6.7 Summary
- 6.8 Questions

6.0 OBJECTIVES

- To know the concept of Allocative and Productive efficiency
- To understand producer and consumer surplus
- To know the concept of Market
- To understand the reasons for market failure
- To know what is public good
- To understand the role of government in the economy

6.1 MEANING OF EFFICIENCY

Economic efficiency is a state where every resource is allocated optimally so that each person is served in the best possible way and inefficiency and waste are minimized. Efficiency in economics also explained as “that society is getting the maximum benefits from the scarce resources”. In a free economy, market allocates scarce resources with forces of supply and demand, and equilibrium of supply and demand typically implies an efficient allocation of resources. Under ideal conditions markets ensure that the economy is pareto efficient. In Adam Smith’s words the “invisible hand” of market place leads self-interested buyers and sellers in a market to maximize the total benefit that society derives from that market.

Productive Efficiency

Productive efficiency is concerned with producing goods and services with the optimal combination of inputs to produce maximum output for the minimum cost.

To be productively efficient means the economy must be producing on its production possibility frontier. (i.e. it is impossible to produce more of one good without producing less of another).

In Fig. 6.1 AB is the production possibility curve. The points **b**, **d**, **c** are the points where the maximum (optimum) output of goods X and Y can be produced. Any point inside the curve such as **a**, is productively inefficient. When we move from **a** to **c**, we increase the production of X from X to X_1 , without reducing output of Y. Similarly if we move from **A** to **b**, we produce more of Y (i.e. YY_1), without having less of X. When we move from **a** to **c** or **a** to **b**, we achieve productive efficiency in terms of goods X in the first case and in terms of good Y in the second case.

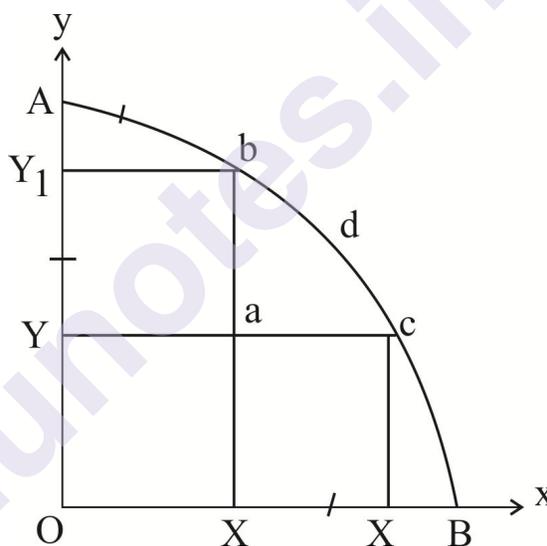


Fig. 6.1

Productive efficiency in an economy is achieved when an economy produces at any point on its production possibility curve and not at any point inside the PPC.

Productive efficiency is achieved when it is **impossible** to reallocate resources as to produce more of one product without producing less of the other product.

In case of a firm, productive efficiency requires that it produces its output with least cost input combination. In other words, maximum output is produced with minimum cost. It is a point where output is produced in such a way that the ratio of marginal products of each pair of factors is made equal to the ratio of their prices.

When we apply this condition to an industry, productive efficiency is obtained when the marginal cost of producing the last unit of output of a firm must be the same for each firm in any industry.

Definition of allocative efficiency

This occurs when there is an optimal distribution of goods and services, taking into account consumer's preferences. A more precise definition of allocative efficiency is at an output level where the Price equals the Marginal Cost (MC) of production. This is because the price that consumers are willing to pay is equivalent to the marginal utility that they get. Therefore, the optimal distribution is achieved when the marginal utility of the good equals the marginal cost.

Example using diagram

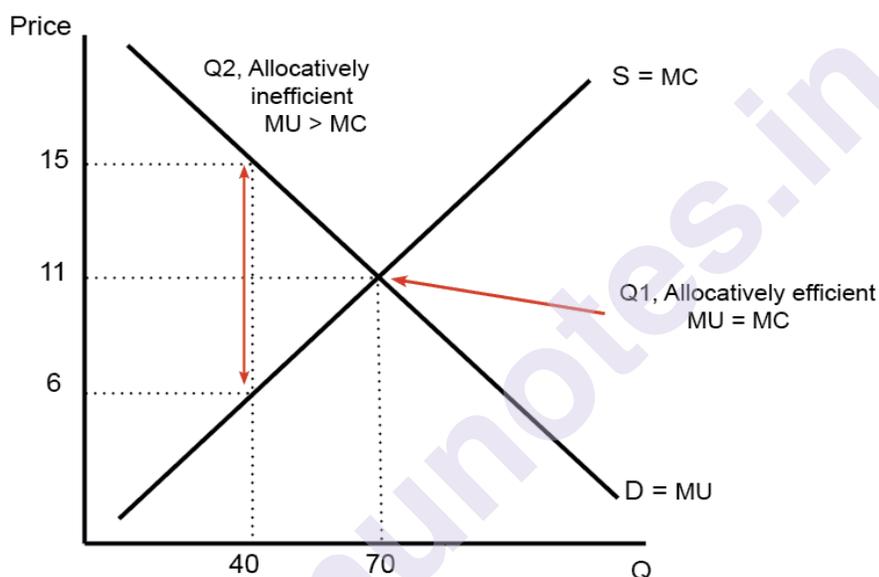


Fig. 6.2

At an output of 40, the marginal cost of the good is Rs 6, but at this output, consumers would be willing to pay a price of Rs15. The price (which reflects the good's marginal utility) is greater than marginal cost – suggesting under-consumption. If output increased and price fell, society would benefit from enjoying more of the good.

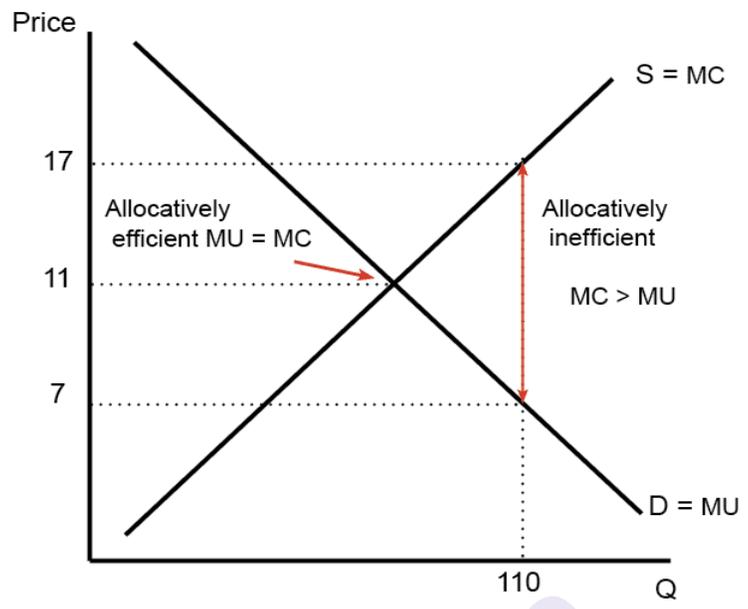


Fig. 6.3

At an output of 110, the marginal cost is Rs17, but the price people are willing to pay is only Rs7. At this output, the marginal cost (Rs17) is much greater than the marginal benefit (Rs7) so there is over-consumption. Society is over-producing this good.

Allocative efficiency will occur at a price of Rs11. This is where the marginal cost (MC) = marginal utility.

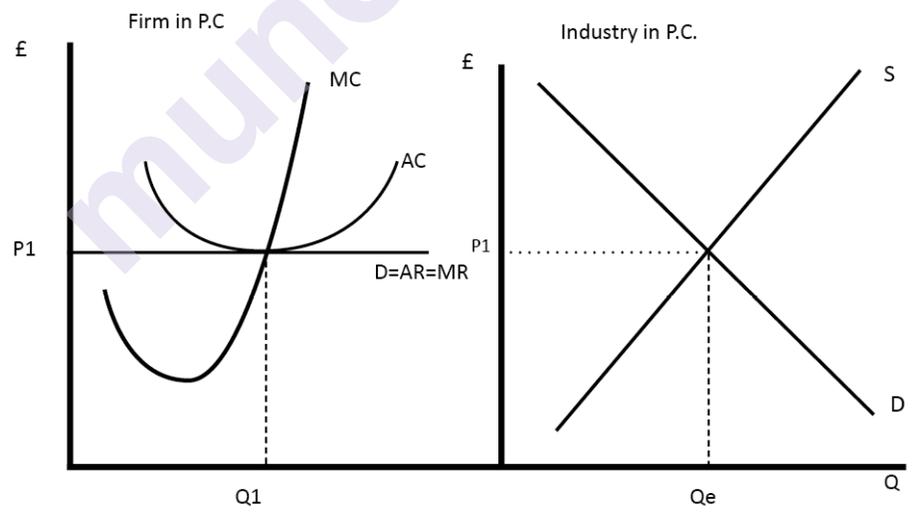


Fig. 6.4

- Firms in perfect competition are said to produce at an allocative efficient level because at Q_1 , $P=MC$
- Monopolies can increase price above the marginal cost of production and are allocatively inefficient. This is because

monopolies have market power and can increase price to reduce consumer surplus.

Efficiency – Market-Government

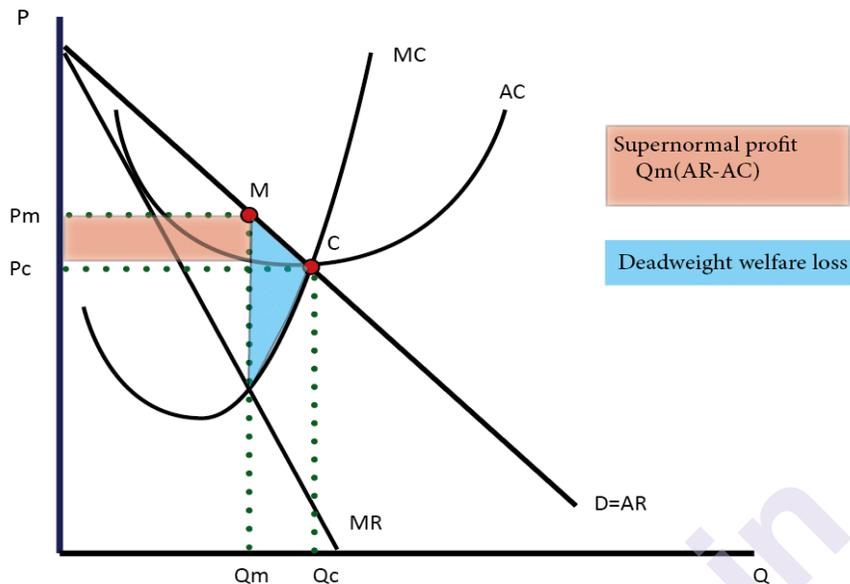


Fig. 6.5

- Monopoly sets a price of P_m . This is allocatively inefficient because at this output of Q_m , price is greater than MC.
- Allocative efficiency would occur at the point where the MC cuts the Demand curve so Price = MC.
- The area of deadweight welfare loss shows the degree of allocative inefficiency in the economy.

6.6. CRITERION OF SUM OF CONSUMER AND PRODUCER SURPLUS

A free market economy functions to maximize benefit or welfare of both consumers and producers. One of the measures adopted by economists or economic planners is the criterion of sum of consumer and producer surplus.

To understand this measure let us recall the measurement of consumer and producer surplus.

Consumer's Surplus = The price a consumer is willing to pay (Value to buyers) - Price paid by buyers

Producers' Surplus = Market price of the commodity (Price received by sellers) - Minimum price the producer must receive (Cost to sellers)

We obtain total surplus by adding consumer surplus and producer surplus

$$\begin{aligned} \text{Total surplus} &= (\text{Value to buyers} - \text{Price paid by buyers}) \\ &+ (\text{Price received by sellers} - \text{Cost to Seller}) \end{aligned}$$

The price paid by buyers equals to the price received by sellers, therefore the middle two terms in the above measure cancel each other.

Therefore, **Total Surplus = Value to buyers – Cost to sellers**

We explain the above concept with help of a diagram.

In a perfectly competitive market both producers and consumers stand to gain by obtaining surplus.

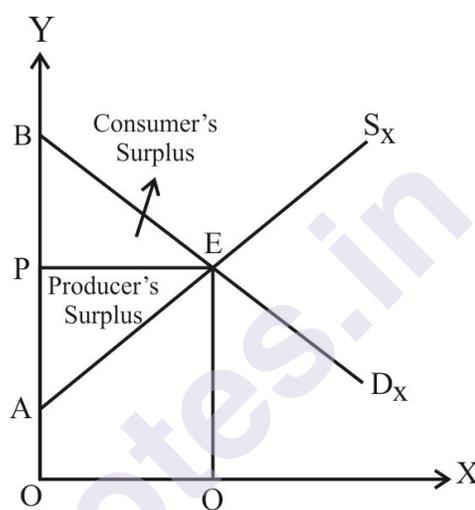


Fig. 6.6

Fig. 6.6, OQ is the equilibrium output, sold at price OP per unit. The area above the supply curve (AS_x) and below the price line (PE) is the producer's surplus. The area below the demand line (D_x) and above the price line (PE) is the consumer's surplus. At the equilibrium point E, and output OQ, under perfect competition, the market efficiency enables producers and consumers to maximize their surplus. Production less than OQ reduces surplus of both producers and consumers. Production beyond OQ, will make producers to incur cost more than the price they receive as the price is lower than the supply curve (cost). Similarly beyond point E, that is output more than OQ will make consumers to pay more than what they are willing to pay, as the price is higher than the demand curve. A perfectly competitive market ensures maximum possible benefit both to the producers and consumers.

Any point prior to beyond point E, is less efficient in consumption and production, as explained in Fig. 6.7.

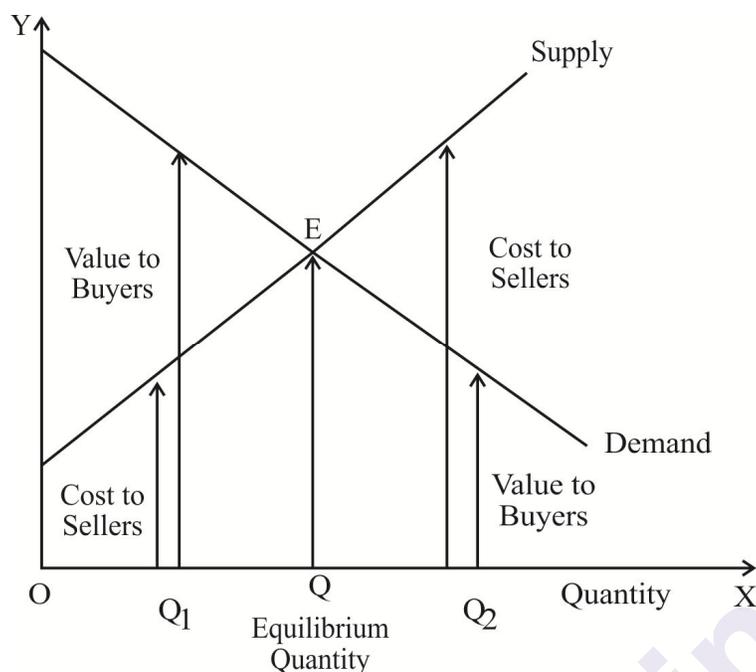


Fig. 6.7

Quantity less than equilibrium quantity, e.g. Q_1 , the value to buyers exceeds the cost to sellers. At quantity greater than equilibrium quantity e.g. Q_2 , the cost to sellers exceeds the value to the buyers. Only at the equilibrium quantity (Q), the sum of producer and consumer surplus is maximum.

From the above analysis we can arrive at the following observations :

1. Free markets allocate the supply of goods to the buyers who value them most highly, as measured by their willingness to pay.
2. Free market allocates the demand for goods to the sellers who can produce them at the lowest cost.
3. Free markets produce the quantity of goods that maximizes the sum of consumers and producer surplus.

The above observations tell us that market forces (demand and supply) maximize the sum of consumers' and producers' surplus. The above outcome is unlikely, if the economy is managed by the government totally (Socialist or Communist) or partially, that is mixed economy as it is in India.

It is, therefore, best to leave the economy to the market forces. The policy of leaving the economic decisions to the market is called **Laissez faire**, the French expression, which means “**allow them to do**”.

6.3 MARKET

A market, as we knew, is a place where sellers (producers) and buyers meet for settling a transaction. A market is defined “as a group of firms and individuals that are in touch with each other in order to buy and sell some goods:.

According to N. George Mankiw, a market with many buyers and sellers, trading identical products, so that each buyer and seller is a price taker is called a competitive market. It is also sometimes called a perfectly competitive market.

Sellers aim at maximizing their profit, and buyers attempt to maximize their total utility or satisfaction, in an ideal market, what is usually called perfect competition.

In reality, markets do not fulfill all the required conditions to make them perfectly competitive.

6.4 MARKET FAILURE

Market failure occurs when the price mechanism fails to account for all of the costs and benefits necessary to provide and consume a good. The market will fail by not supplying the socially optimal amount of the good.

Prior to market failure, the supply and demand within the market do not produce quantities of the goods where the price reflects the marginal benefit of consumption. The imbalance causes allocative inefficiency, which is the over- or under-consumption of the good.

The structure of market systems contributes to market failure. In the real world, it is not possible for markets to be perfect due to inefficient producers, externalities, environmental concerns, and lack of public goods. An externality is an effect on a third party which is caused by the production or consumption of a good or service.

Market failure is an economic term that involves a situation where, in any given market, the quantity of a product demanded by consumers does not equate to the quantity supplied by suppliers. Market failure occurs when resources are misallocated, or allocated inefficiently. In other words, market failure occurs when markets fail to produce and allocate scarce resources in the most efficient way; i.e. the market may not always allocate scarce resources efficiently in a way that achieves the highest total social welfare.

Michael Todaro explains market failure as a “phenomenon that results from the existence of market imperfections that weaken the functioning of a free market economy i.e. it ‘fails’ to realize its theoretical beneficial results. He attributes market failure to monopoly power, factor immobility, significant externalities and lack of knowledge.

One is the failure of the market system to achieve efficiency in the allocation of society's resources.

The other is the failure of the market system to serve social goals other than efficiency, such as achieving some desired distribution of income or preserving our value system.

M.G. Mankiw defines market failure as “a situation in which a market left on its own fails to allocate resources efficiently”.

Causes of Market Failure

Markets do not function in a perfect manner as they are expected to do so in a theoretical model. They fail to perform efficiently due to a number of reasons such as availability of public goods, business corporate acquiring monopoly power in real world market which is full of imperfections, externalities arising out of economic activities, imperfect or asymmetric information, unequal income distribution and many other factors. Let us briefly discuss these factors.

1. PUBLIC GOODS

Most goods in the economy are allocated in markets, where buyers pay for what they receive and sellers are paid for what they provide. For these goods, prices are the signals that guide the decisions of buyers and sellers, and these decisions lead to an efficient allocation of resources.

A public good is a special type of good that can be consumed by everyone, regardless of whether they have paid for the good. When goods are available free of charge, however, the market forces that normally allocate resources in the economy are absent.

6. MARKET POWER

An imperfectly competitive market is one where the assumption of large number of buyers and sellers does not hold. These types of market organizations include monopoly, monopsony, oligopoly, and monopolistic competition.

None of these markets are efficient. In general, the firms do not produce the socially optimal quantities (they tend to under-produce) and the price is higher than it would be under perfect competition. The condition $P = MC$ does not hold, and the system does not produce the most efficient product mix.

Market control (or market power) arises when buyers or sellers are able to exert influence over the price of a good and/or the quantity exchanged. The ability to control the market, especially the market price, prevents a market from equating demand price and supply price.

Market control on the supply side allows sellers to set a demand price, the value of the good produced, above the value of goods not produced.

An extreme example of market control on the supply side exists with monopoly, a market with a single seller. A less extreme, but more common example is oligopoly, a market with a small number of large sellers.

Market control on the demand side allows buyers to set a supply price, the value of goods not produced, below the value of the good produced. An extreme example of market control on the demand side exists with **monopsony**, a market with a single buyer. A less extreme, but more common example is **oligopsony**, a market with a small number of large buyers.

Common examples of markets with supply-side or demand-side control include city-wide electrical distribution (monopoly), automobile manufacturing (oligopoly), employment in a company in town (monopsony), and employment in professional sports (oligopsony).

The existence of **monopoly power** is often thought to create the potential for market failure and a need for intervention to correct for some of the welfare consequences of monopoly power.

The classical economic case against monopoly is that :

- (a) Price is higher and output is lower under monopoly than in a competitive market.
- (b) This causes a net economic welfare loss of both consumer and producer surplus.
- (c) $\text{Price} > \text{marginal cost}$ – leading to allocative inefficiency and a Pareto sub-optimal equilibrium.
- (d) Rent seeking behaviour by the monopolist might add to the standard costs of monopoly. This includes high (possibly excessive) amounts of spending on persuasive advertising and marketing.
- (e) If the monopolist allows cost efficiency to drop then an upward drift in costs takes place. Lack of effective competition in the market-place can lead to consumers facing higher prices and a reduction in their real standard of living.

EXTERNALITIES

An externality arises when a person engages in an activity that influences the well being of a bystander (or third party) and yet neither pays nor receives any compensation for that effect. Third parties are individuals, organizations, or communities indirectly benefitting or suffering as a result of the actions of consumers and producers attempting to pursue their own self-interest. The potential market failure arising from externalities is that

the social optimum output or level of consumption diverges from the private optimum.

If the impact on the bystander (or third party) is adverse, it is called a **negative externality** (e.g. consumers and producers may fail to take into account the effects of their actions on third parties, such as car drivers, who may fail to take into account the traffic congestion they create for others; or producers fail to take into account pollution, radiation, and other production by products). If it is beneficial it is called a **positive externality** (e.g., the benefits of education extend beyond those receiving the education and thus beyond the market exchange).

Negative externalities lead markets to produce a larger quantity than is socially desirable e.g., when the firms do not pay for the pollution their cost would be low and they would produce more.

Positive externalities lead markets to produce a smaller quantity than is socially desirable e.g. if an entrepreneur stages a fireworks show, people can watch the show from their windows or backyards. Because the entrepreneur cannot charge a fee for consumption, the fireworks show may go unproduced, even if demand for the show is strong.

To remedy the problem, governments can internalize the externality by taxing goods that have negative externalities and subsidizing the goods that have positive externalities.

ASYMMETRIC INFORMATION

Asymmetric information is a market situation in which one party in a transaction has more information than the other party. This can affect the firm's strategy. It can lead to market failures.

The lack of information among buyers or sellers often means that the demand price does not reflect all benefits of a good or the supply price does not reflect all opportunity costs of production. That is, buyers might be willing to pay more or less for a good because they don't know the true benefits generated. Or sellers might be willing to accept more or less for a good than the true opportunity cost of production.

In many cases, sellers have better information about a good than buyers. Sellers own and control the good, they have direct contact with the good. If there are defects or problems with the good, they are likely to know. Buyers, in contrast, have much less familiarity with a good, perhaps only knowing the information provided by the sellers. In this case, buyers are likely to have a different demand price than the value of the good produced, a value based on more complete information. In other words, markets may not provide enough information because, during a market transaction, it may not be in the interest of one party to provide full information to the other party.

Asymmetric information can lead to poorly functioning markets, that is, too much or too little of a good may be produced. Consumers may fear purchasing goods when they know that the seller knows more about the quality of a good than they do. The greater the information asymmetry between sellers and consumers, the greater the scope for deception and fraud.

A downward economic activities may be due to asymmetric information between economic agents.

Asymmetric information leads to market inefficiencies and thus to market failures. Thus, government has to take measures to improve the information for consumers, investors and other market participants.

INEQUALITY

Markets may also fail to limit the size of the gap between income earners, the so called income gap. Market transactions reward consumers and producers with incomes and profits, but these rewards may be concentrated in the hands of a few. There is nothing in the market mechanism that guarantees an equitable distribution of income in the society.

Market failure can also be caused by the existence of inequality throughout the economy. Wide differences in income and wealth between different groups within an economy lead to a wide gap in living standards between wealthy households and those experiencing poverty. Society may come to the view (a value judgment) that too much inequality is unacceptable or undesirable.

MISSING MARKETS AND INCOMPLETE MARKETS

A market considered to be complete when it provides all goods and services for which the cost of provision is less than what individuals are willing to pay. Whenever private markets fail to provide a good or service even though the cost of providing it is less than what individuals are willing to pay, they are considered as **incomplete markets**. Incomplete markets are the cases of market failures.

Markets may fail to perform, resulting in a failure to meet a need or want, such as the need for public goods, like defence, street lighting, and highways. In the latter case (incomplete markets) markets may fail to produce enough merit goods, such as education and healthcare.

A missing market is a situation where resource allocation based on a competitive market does not exist. Missing markets are nothing but market failures. Externalities, public goods, etc. are the cases of missing markets.

MERIT GOODS

Merit Goods are those goods and services that the government feels that people left to themselves will under-consume and which therefore ought to be subsidized or provided free at the point of use.

Both the public and private sector of the economy can provide merit goods and services. Consumption of merit goods is thought to generate positive externality effects where the social benefit from consumption exceeds the private benefit.

Example include; health services, education, work training, public libraries, vaccinations.

UNSTABLE MARKETS

Sometimes markets become highly unstable, and a stable equilibrium may not be established, such as with certain agricultural markets, foreign exchange, and credit markets. Such volatility may require intervention.

DE-MERIT GOODS

Markets may also fail to control the manufacture and sale of goods like cigarettes and alcohol, which have less merit than consumers perceive.

PROPERTY RIGHTS

Markets work most effectively when consumers and producers are granted the right to own property, but in many cases property rights cannot easily be allocated to certain resources. Failure to assign property rights may limit the ability of markets to form.

6.5 PUBLIC GOODS

A **public good** is a special type of good that can be consumed by everyone, regardless of whether they have paid for the good. When goods are available free of charge, however, the market forces that normally allocate resources in the economy are absent.

To understand how public goods differ from other goods and what problems they present for society consider their characteristics;

- (a) **Non-excludability** : where it is not possible to provide a good or service to one person without it thereby being available for others to enjoy. A good is not excludable because it is impossible to prevent someone from using the good or availing of its benefits.
- (b) **Non-rivalry** : where the consumption of a good or service by one person will not prevent others from enjoying it. A good is non-rival in consumption because one person's enjoyment of the good/s does not reduce anyone else's enjoyment of them.

Since the benefits of such goods are available to all, consumers will not voluntarily pay for those goods. This is the **free-rider problem** that accompanies public goods. Since it is difficult to exclude anyone from using them, those who benefit from the public goods have an incentive to avoid paying for them. Hence, the market failure occurs in the provision of public goods.

Common examples of public goods include street lighting/light house protection, national and domestic security i.e. national defence and police services, public health, flood defence systems, public parks and beaches, public welfare programmes, education, roads, research and development, and a clean environment. In each case consumption by one does not impose an opportunity cost on others and non payers cannot be excluded from consumption. In each case, markets fail to efficiently allocate the production, consumption, or provision of the goods.

Markets will not supply public goods or if they supply they will not supply enough of public goods. Since the markets fail in the above cases, public goods provide a rationale for many government activities.

6.6 ROLE OF GOVERNMENT

The state or the government can play an important role to correct market failures and improve economic efficiency. The presence of government may reflect the political and social ideologies prevailing in the country. More importantly, the prevalence of governments reflects the fact that the market mechanism alone cannot perform all economic functions. Government intervention is needed in the economy for the following reasons :

- (i) **To improve economic efficiency** by correcting market failures.
- (ii) **To pursue social values of equity** by altering market outcomes.
- (iii) **To pursue other social objectives** by the provision of public and merit goods and at the same time prohibiting the consumption of demerit goods.

The role of the state or the government is explained below :

1. **Securing conditions for the functioning of market mechanism** : It is argued that market mechanism leads to an efficient allocation of resources, that is, it produces what consumers want most and does so in the cheapest way. This argument is based on the condition that there is perfect competition in the factor and product markets. For this, there must not be any obstacles to free entry into and exit from the market. It also requires that consumers and producers have complete knowledge about the market. Government regulation and measures will be needed to secure the conditions necessary for the functioning of market mechanism.

The government has an important role in correcting market failures arising from imperfect information, imperfect competition, externalities and public goods. In the case of imperfect competitions, firms use their market power to raise prices and reduce output. The Monopoly **MRTP Act** or **Competition Policy Act** of the government of the India can help to maintain competitive force and restrain firms from abusing their monopoly power. Similarly, imperfect information can lead to inefficient functioning of product and labour markets. Government can set up regulatory authorities such as **SEBI** (Securities Exchange Board of India) to compel the firms to provide information about their financial conditions and other aspects.

2. **Providing legal framework:** The contractual arrangements and exchanges needed for market operation cannot exist without the protection and enforcement of a governmentally provided legal framework. In this respect, government can provide necessary legal structure and ensure their implementation by the firms and other parties in the market. In India regulatory authorities like SEBI provide the legal framework.
3. **Provision of public goods and merit goods :** Even if the legal structure is provided and barriers to competition are removed, the production or consumption characteristics of certain goods like public goods and merit goods are such that they cannot be provided through the market. In the case of public goods there is the free rider problem. As a consequence the market fails in the provision of public goods. Thus, government has to ensure their provision. On the other hand merit goods are the goods that the governments consider as good for the people, for example education. If they are provided by the market people may under consume such goods. Thus they have to be subsidized or provided free by the government.
4. **Correcting the problems arising from externalities:** Externalities lead to “market failure”. This requires correction by the government either by way of budgetary provisions, subsidies or taxation. In the case of goods with positive externalities (like research), firms produce too little of goods and in the case of goods with negative externalities (such as that generate pollution), firms produce too much of goods. Governments can subsidise the production of goods with positive externalities and tax or regulate those with negative externalities.
5. **Correcting inequal distribution of income and wealth:** The distribution of income and wealth which results from the market system and from the transfer of property rights through inheritance is likely to be unequal, in the market system, individual’s incomes are related to their ownership of assets and their productivity. In most of the countries, wealth is concentrated in the hands of a few. In many countries inequalities are linked to inheritance. Even in wages and salaries there is unjustified gap between the lowest and highest

payment. The government has to work towards redistribution of income from the rich to the poor through welfare programmes and taxation policies.

6. **Securing important social objectives:** The market system does not necessarily bring high employment, price level stability, social desired rate of growth, poverty eradication and economic development. Government policies are needed to secure these objectives.
7. **Provision of social security:** The market system cannot provide social security to citizens, suffering from unemployment, sickness, old age disability and so on. The government has to step in to provide social security to its citizens.
8. **Guiding the use of natural resources:** Public and private points of view on discounts used in the valuation of future relative to present consumption differ. This considerably affects the use of natural resources. The market mechanism cannot bring about appropriate allocation of natural resources for the present and future. Similarly, the market mechanism may not be able to control the pollution of environment. Therefore, consumption of natural resources, pollution control, etc. should be guided by government policies.
9. **Public ownership:** If the government feels that, under free market conditions, some industries would charge unreasonably high price and earn abnormal or monopoly profit, it could nationalize the industry and provide goods and services at a desired price. Alternatively, the government may apply rules and regulations to force industries to charge a reasonable price. Nationalisation of major commercial banks in India in 1969 was aimed to meet the financial needs of the poor section of the society at reasonable conditions and price (interest).

2.7 SUMMARY

1. Economic efficiency is a state where every resource is allocated optimally so that each person is served in the best possible way and inefficiency and waste are minimized.
6. Productive efficiency is concerned with producing goods and services with the optimal combination of inputs to produce maximum output for the minimum cost.
3. A free market economy functions to maximize benefit or welfare of both consumers and producers. One of the measures adopted by economists or economic planners is the criterion of sum of consumer and producer surplus.
4. A market is defined “as a group of firms and individuals that are in touch with each other in order to buy and sell some goods.

5. Market failure occurs when resources are misallocated, or allocated inefficiently. In other words, market failure occurs when markets fail to produce and allocate scarce resources in the most efficient way; i.e. the market may not always allocate scarce resources efficiently in a way that achieves the highest total social welfare.
6. Markets fail to perform efficiently due to a number of reasons such as availability of public goods, business corporate acquiring monopoly power in real world market which is full of imperfections, externalities arising out of economic activities, imperfect or asymmetric information, unequal income distribution and many other factors.
7. A **public good** is a special type of good that can be consumed by everyone, regardless of whether they have paid for the good. When goods are available free of charge, however, the market forces that normally allocate resources in the economy are absent.
8. The state or the government can play an important role to correct market failures and improve economic efficiency. The presence / intervention of government may reflect the political and social ideologies prevailing in the country. More importantly, the prevalence of governments reflects the fact that the market mechanism alone cannot perform all economic functions.

2.8 QUESTIONS

1. Explain the term Market failure and write down different causes of market failure?
2. Define and write short note on productive and allocative efficiency?
3. What are public goods? Explain using examples.
4. Explain the role of government in correcting Market failure



PUBLIC REVENUE

Unit Structure

- 7.0 Objectives
- 7.1 Introduction
- 7.2 Meaning of Public Revenue
- 7.3 Sources of Public Revenue
- 7.4 Canons of Taxation
- 7.5 Characteristics of a Good Tax Structure / System
- 7.6 Direct Taxes : Meaning
- 7.7 Indirect Taxes : Meaning
- 7.8 Objectives of Taxation
- 7.9 Tax Base and Rates of Taxation
- 7.10 Summary
- 7.11 Questions

7.0 OBJECTIVES

- To understand the meaning and sources of Public Revenue
- To study various objectives of taxation
- To study the canons of taxation
- To understand the types of taxes
- To understand the concepts of tax base and rates of taxation

7.1 INTRODUCTION

The study of public finance is the deep study of all finance operations related to the state which is therefore concerned with complete income and expenditure of public authorities and administrative structures that are adjusted with one another.

Public finance is a concept that includes Public expenditure, public debt and public revenue and income.

Public revenue is exactly income generated from sources of government in order to meet requirements of expenses of public.

7.2 MEANING OF PUBLIC REVENUE

Public revenue generally refers to government revenue. Some important sources or concepts that are included in public revenue consist of taxes, fees, sale of public goods and services, fines, donations, etc.

Public revenue refers to the income side of the financial operations of the state. It is the revenue or income of public authorities namely central, State, Local bodies etc.

According to Dalton, public revenue can be viewed from a broad as well as a narrow sense. He therefore, makes a distinction between public revenue and public receipts. In a broad sense, the income of public authorities includes all receipts from all possible sources during a specific period, normally a year. It is called public receipts.

In a narrow sense, it refers only to those sources which bring income to the government. These sources are known as revenue sources and include only the non-tax sources of public revenue.

7.3 SOURCES OF PUBLIC REVENUE

The main sources of public revenue are: Tax and Non-tax revenue

1. Tax Revenue:

The chief source of public revenue is Tax. To define tax, it is said that tax is a mandatory imposition of duty on public authority by government organizations to meet requirements of general public as a whole.

Therefore, with the above defined term, some points are highlighted as below:

- i) A Tax is a compulsory duty levied by the government. If any individual refuses to comply with tax payments, he can be punished or penalized
- ii) Tax basically involves some understanding and sacrifice on the basis of a tax payer
- iii) Tax is a duty and not a penalty
- iv) Most part of revenue income is generated from tax by the central government.

Broad classification of taxes is: Direct and Indirect Taxes
Direct taxes:

Direct taxes are levied on wealth and income of individuals or organizations. These taxes are personal income tax, corporate tax, and gift or wealth tax. The impact of direct taxes is on the same person.

Direct taxes are developing in nature and the tax rate increases along with

the tax base. Progressive direct taxes are involved in falling income discrimination especially in rising countries.

Indirect Taxes:

These taxes are levied on manufactured goods and consumable goods in India. Excise duty is the chief and single largest source to generate revenue income.

Rates of excise duty faces a declining trend.

Customs Duty is imposed on exports of selective range and imports. With revenue point of view, Custom duty has less importance. Service Tax is imposed by specific category of firms, agencies or persons. Rate of service taxes have been increased progressively. Goods and service tax includes range of all taxes like excise duty, service tax, goods tax, VAT, etc. It covers goods and service charges in mostly all sectors. It generally simplifies the complexity of charges on goods and services.

2. Non tax revenues

Non Tax Revenue comprises all revenues apart from taxes accumulated to the Government. Non tax revenues are funds that are generated from internal sources.

The sources of revenue are: Administrative revenue, Commercial revenue, Grants and gifts

Important sources of Non tax revenues include

a) Special Assessment:

This can be called as betterment charge. This tax is imposed to a certain category of members of a community who are generally benefited from governmental activities or public functions like constructions of road, railways, parks, etc. Therefore, government imposes special charges on such properties.

b) Surplus of Public Enterprises

The government has arranged public sector enterprises that are concerned in commercial activities. The surpluses generated of these enterprises are a significant source of non-tax revenue. These incomes are in the form of profits that are known as commercial revenues.

c) Fees:

A fee is a significant source of managerial non-tax revenue charged by Government authorities for depiction services to the members of the public. There is no compulsion to pay fees. All those utilize services may pay fees. Fees may be charged for getting licenses, passports or registrations, filing of court cases, etc.

d) Fine and Penalties

These are general sources of administrative non tax revenues. These may be applied on public for non compliance with certain rules and regulations. These are not considered as the major source of revenue for the government.

e) Grants and Gifts

Grants are financial support. These are provided to public authority to perform certain social activities. These are generated by higher public authority to lower ones e.g. World bank gives grants to State bank. There is no repayment compulsion. Gifts and donations are voluntarily made by individuals, organizations or foreign governments to the Central Government. These gifts are made by natural feeling in case of disasters or natural calamities. Gifts are not considered as a source of income. Therefore, tax plays an important part in generating government revenue. Non tax is important in developing revenue.

7.4 CANONS OF TAXATION

Canons of Taxation are the main basic principles (i.e. rules) set to build a 'Good Tax System'. Canons of Taxation were first originally laid down by economist Adam Smith in his famous book "The Wealth of Nations".

In this book, Adam smith only gave four canons of taxation. These original four canons are now known as the "Original or Main Canons of Taxation".

As the time changed, governance expanded and became much more complex than what it was at the Adam Smith's time. Soon a need was felt by modern economists to expand Smith's principles of taxation and as a response they put forward some additional modern canons of taxation.

Adam Smith's Four Main Canons of Taxation

A good tax system is one which is designed on the basis of an appropriate set of principles (rules). The tax system should strike a balance between the interest of the taxpayer and that of tax authorities. Adam Smith was the first economist to develop a list of Canons of Taxation. These canons are still regarded as characteristics or features of a good tax system.

Adam Smith gave following four important canons of taxation.

1. Canon of Equity

The principle aims at providing economic and social justice to the people. According to this principle, every person should pay to the government depending upon his ability to pay. The rich class people should pay higher taxes to the government, because without the protection of the government authorities (Police, Defence, etc.) they could not have earned and enjoyed their income. Adam Smith argued that the taxes

should be proportional to income, i.e., citizens should pay the taxes in proportion to the revenue which they respectively enjoy under the protection of the state.

2. Canon of Certainty

According to Adam Smith, the tax which an individual has to pay should be certain, not arbitrary. The tax payer should know in advance how much tax he has to pay, at what time he has to pay the tax, and in what form the tax is to be paid to the government. In other words, every tax should satisfy the canon of certainty. At the same time a good tax system also ensures that the government is also certain about the amount that will be collected by way of tax.

3. Canon of Convenience

The mode and timing of tax payment should be as far as possible, convenient to the tax payers. For example, land revenue is collected at time of harvest income tax is deducted at source. Convenient tax system will encourage people to pay tax and will increase tax revenue.

4. Canon of Economy

This principle states that there should be economy in tax administration. The cost of tax collection should be lower than the amount of tax collected. It may not serve any purpose, if the taxes imposed are widespread but are difficult to administer. Therefore, it would make no sense to impose certain taxes, if it is difficult to administer.

Additional Canons of Taxation

Activities and functions of the government have increased significantly since Adam Smith's time. Government are expected to maintain economic stability, full employment, reduce income inequality & promote growth and development. Tax system should be such that it meets the requirements of growing state activities.

Accordingly, modern economists gave following additional canons of taxation.

5. Canon of Productivity

It is also known as the canon of fiscal adequacy. According to this principle, the tax system should be able to yield enough revenue for the treasury and the government should have no need to resort to deficit financing. This is a good principle to follow in a developing economy.

6. Canon of Elasticity

According to this canon, every tax imposed by the government should be elastic in nature. In other words, the income from tax should be capable of increasing or decreasing according to the requirement of the country.

For example, if the government needs more income at time of crisis, the tax should be capable of yielding more income through increase in its rate.

7. Canon of Flexibility

It should be easily possible for the authorities to revise the tax structure both with respect to its coverage and rates, to suit the changing requirements of the economy. With changing time and conditions the tax system needs to be changed without much difficulty. The tax system must be flexible and not rigid.

8. Canon of Simplicity

The tax system should not be complicated. That makes it difficult to understand and administer and results in problems of interpretation and disputes. In India, the efforts of the government in recent years have been to make the system simple.

9. Canon of Diversity

This principle states that the government should collect taxes from different sources rather than concentrating on a single source of tax. It is not advisable for the government to depend upon a single source of tax, it may result in inequity to the certain section of the society; uncertainty for the government to raise funds. If the tax revenue comes from diversified source, then any reduction in tax revenue on account of any one cause is bound to be small.

7.5 CHARACTERISTICS OF A GOOD TAX STRUCTURE/ SYSTEM

The tax structure is a part of economic organisation of a society and therefore fit in its overall economic environment. No tax system that does not satisfy these basic condition can be termed a good one. However, the state should pursue mainly following principles in structuring its tax system :-

1. The distribution of tax burden should be equitable. Everyone should be made to pay as per their ability. It collects more from richer section and less from poorer section.
2. The tax system should encourage productive efficiency. It should provide incentive to increase savings and investment. It may lead to favourable allocation of resources.
3. A tax system should be diversified. It may rely on different bases, such as , income, wealth and expenditure.
4. The primary aim of the tax should be to raise adequate revenue to meet public expenditure since the modern government performs various functions in the economy.

5. The tax system should be flexible to change with changing requirements of the government and the economy.
6. A good tax system should recognize the basic rights of the tax payer, and therefore, it should be simple, certain and convenient.
7. The tax system should be economical. Administrative machinery should be efficient and honest. It should involve minimum cost of collection.
8. A good tax system should also facilitate stability and growth objectives. Growth with stability is an important objective for both developed and developing countries.

In general a good tax system should run in harmony with important national objectives and if possible should assist the society in achieving them. Thus, the good tax system should be designed so as to meet the requirements of equity in the distribution of tax burden, efficiency in the tax use, goals of macroeconomic policy and ease of administration.

Direct and Indirect Taxes

With the budget session around the corner, there is lot of noise about taxes. Taxes don't just mean your income-tax; there are many other forms of tax that an individual pays without directly seeing the hit. While income-tax is a direct tax, the latter are called indirect taxes. Here's a look at what the two categories cover and how they impact you.

7.6 DIRECT TAXES : MEANING

A direct tax is one, which is paid by a person on whom it is legally imposed and the burden of which cannot be shifted to any other person. The person from whom it is collected cannot shift its burden to anybody else. The tax-payer is the tax-bearer. The impact i.e. the initial burden and its incidence i.e. the ultimate burden of direct tax is on the same person. For e.g. Income tax, wealth tax, property tax, estate duties, capital gain tax, corporate / company tax, etc. are all direct taxes.

This kind of levy is payable directly by the individual or company, whose obligation it is to pay. It can't be transferred to anyone else. The most common form of direct tax is income-tax, which has to be paid by individuals, hindu undivided families (HUFs), cooperative societies and trusts on the total income they earn. This can include income from salary, income from house property, business and professional income, capital gains and income from other sources such as interest. The tax liability depends on the residential status and gender of the person being taxed.

Companies are also taxed on the income they earn. For Indian companies, tax is obligatory on income earned in India and overseas, whereas in case of non-resident companies tax has to be paid on money earned in India.

A house owner has to pay property tax, which is applied as per state rules. Lastly, if you receive a gift in excess of Rs.50,000 per year, you will have to pay gift tax.

The onus of declaring income for the purpose of calculating direct tax liability is on you. Non-payment or tax evasion can incur heavy penalty.

Advantages / Merits of Direct Taxes :

Following are the important advantages or merits of Direct Taxes :-

1. Equity

There is social justice in the allocation of tax burden in case of direct taxes as they are based on the principle of ability to pay. Persons in a similar economic situation are taxed at the same rate. Persons with different economic standing are taxed at a different rate. Hence, there is both horizontal and vertical equity under direct taxation. Progressive direct taxation can reduce income inequalities and bring about adequate social & economic justice.

For example, in the Indian Budget of 2007, individual with an income of up to Rs. 1,10,000 are exempted from payment of income tax and in the case of women tax payer, the exemption limit is Rs. 1,45,000.

2. Certainty

As far as direct taxes are concerned, the tax payer is certain as to how much he is expected to pay, as the tax rates are decided in advance. The Government can also estimate the tax revenue from direct taxes with a fair accuracy. Accordingly, the Government can make adjustments in its income and expenditure.

3. Relatively Elastic

The direct taxes are relatively elastic. With an increase in income and wealth of individuals and companies, the yield from direct taxes will also increase. Elasticity also implies that the government's revenue can be increased by raising the rates of taxation. An increase in tax rates would increase the tax revenue.

4. Creates Public Consciousness

They have educative value. In the case of direct taxes, the taxpayers are made to feel directly the burden of taxes and hence take keen interest in how public funds are spent. The taxpayers are likely to be more aware about their rights and responsibilities as citizens of the state.

5. Economical

Direct taxes are generally economical to collect. For instances, in the case of personal income tax, the tax can be deducted at source from the income

or salaries of the individuals. Therefore, the government does not have to spend much in tax collection as far as personal income tax is concerned. However, in the case of indirect taxes, the government has to set up an elaborate machinery to collect taxes.

6. *Anti-inflationary*

The direct taxes can help to control inflation. During inflationary periods, the government may increase the tax rate. With an increase in tax rate, the consumption demand may decline, which in turn may reduce inflation.

advantages / Demerits of Direct Taxes

Though direct taxes possess above mentioned merits, the economist have criticised them on the following grounds :-

1. *Tax Evasion*

In India, there is good amount of tax evasion. The tax evasion is due to High tax rates, Documentation and formalities, Poor and corrupt tax administration. It is easier for the businessmen to evade direct taxes. They invariably suppress correct information about their incomes by manipulating their accounts and evade tax on it.

In less developed countries like India, due to high rate of progressive tax evasion & avoidance are extensive and led to rise in black money.

2. *Arbitrary Rates*

The direct taxes tend to be arbitrary. Critics point out that there cannot be any objective basis for determining tax rates of direct taxes. Also, the exemption limits in the case of personal income tax, wealth tax, etc., are determined in an arbitrary manner. A precise degree of progression in taxation is also difficult to achieve. Therefore direct taxes may not always fulfill the canon of equity.

3. *Inconvenient*

Direct taxes are inconvenient in the sense that they involve several procedures and formalities in filing of returns. For most people payment of direct tax is not only inconvenient, it is psychological painful also. When people are required to pay a sizeable part of their income as a tax to the state, they feel very much hurt and their propensity to evade tax remains high. Further every one who is required to pay a direct tax has to furnish appropriate evidence in support of the statement of his income & wealth & for this he has to maintain his accounts in proper form. Direct tax is considered inconvenient by some people because they have to make few lump sum payments to the governments, whereas their income receipts are distributed over the whole year.

4. *Narrow Coverage*

In India, there is a narrow coverage of direct taxes. It is estimated that only three percent of the population pay personal income tax. Due to low coverage, the government does not get enough funds for public expenditure. Estate duty & wealth tax are equally narrow based and thus revenue proceeds from these taxes are invariably small.

5. *Affects Capital Formation*

The direct taxes can affect savings and investment. Due to taxes, the net income of the people gets reduced. This in turn reduces savings. Reduction in savings results in low investment. The low investment affects capital formation in the country.

6. *Effect on Willingness and Ability to Work*

Highly progressive direct taxes reduce people's ability and willingness to work and save. This in turn may have a negative impact on investment and productive capacity in the economy. If tax burden is high, people's consumption level gets adversely affected and this has an impact on their ability to work and save. High taxes also discourage people from working harder in order to earn and save more.

7. *Sectoral Imbalance*

In India, there is Sectoral imbalance as far as direct taxes are concerned. Certain sectors like the corporate sector is heavily taxed, whereas, the agriculture sector is 100% tax free. Even the large rich farmers are exempted from payment of personal income tax.

Conclusion on Direct Taxes

In direct tax burden of tax cannot be shifted. The disadvantage of direct taxation are mainly due to administrative difficulties and inefficiencies. The extent of direct taxation should depend on the economic state of the country. A rich country has greater scope for direct taxation than a poor country. However direct taxation is an important aspect of the modern financial system.

7.7 INDIRECT TAXES : MEANING

Indirect tax is levied by the government and collected by an intermediary from the person who bears the ultimate economic burden of the tax. What this means is that if you are purchasing goods or services from anywhere and you are the final consumer, then the tax levied on the manufacturer will ultimately get passed on to you. This kind of tax increases the total amount you pay for something. Sometimes it may be represented separately from the price of the item or may be shown together with the cost of the product itself. For example, the service tax paid on a food bill is shown separately, but tax paid on fuel is included in the product price.

An indirect tax is one in which the burden can be shifted to others. The tax payer is not the tax bearer. The impact and incidence of indirect taxes are on different persons. An indirect tax is levied on and collected from a person who manages to pass it on to some other person or persons on whom the real burden of tax falls. For e.g. commodity taxes or sales tax, excise duty, custom duties, etc. are indirect taxes.

There are many forms of indirect taxes. Customs duty is a tax levied on items imported (and exported out of) into India. The central government also charges an excise duty or a tax payable on goods manufactured in India for domestic consumption. Service tax is a charge applied on services such as food and beverage, travel and recreation by the provider, while value-added tax is applied at each stage of sale of a product and the final tax is borne by the last consumer. Lastly, there is securities transaction tax levied on all transactions done on a stock exchange.

The reason why these are called indirect taxes is because unlike direct taxes, the person paying the tax to the government can pass it on to another person. They are charged first at the manufacturers' level, but ultimately get passed on to the consumer, which is you.

Hicks classifies direct & indirect taxes on the basis of administrative arrangements. In case of direct tax-there is a direct relationship between the taxpayer and the revenue authorities. A tax collecting agency directly collects the tax from the taxpayers, whereas in case of indirect taxes there is no direct relationship between the taxpayers and the revenue authorities. They are collected through traders and manufacturers.

Over the years the share of indirect tax has declined in India due to reduction in the rates of indirect taxes.

Advantages / Merits of Indirect Taxes

The merits of indirect taxes are briefly explained as follows :-

1. Convenient

Indirect taxes are imposed on production, sale and movements of goods and services. These are imposed on manufacturers, sellers and traders, but their burden may be shifted to consumers of goods and services who are the final taxpayers. Such taxes, in the form of higher prices, are paid only on purchase of a commodity or the enjoyment of a service. So taxpayers do not feel the burden of these taxes. Besides, money burden of indirect taxes is not completely felt since the tax amount is actually hidden in the price of the commodity bought. They are also convenient because generally they are paid in small amounts and at intervals and are not in one lump sum. They are convenient from the point of view of the government also, since the tax amount is collected generally as a lump sum from manufacturers or traders.

2. *Difficult to evade*

Indirect taxes have in built safeguards against tax evasion. The indirect taxes are paid by customers, and the sellers have to collect it and remit it to the Government. In the case of many products, the selling price is inclusive of indirect taxes. Therefore, the customer has no option to evade the indirect taxes.

3. *Wide Coverage*

Unlike direct taxes, the indirect taxes have a wide coverage. Majority of the products or services are subject to indirect taxes. The consumers or users of such products and services have to pay them.

4. *Elastic*

Some of the indirect taxes are elastic in nature. When government feels it necessary to increase its revenues, it increases these taxes. In times of prosperity indirect taxes produce huge revenues to the government.

5. *Universality*

Indirect taxes are paid by all classes of people and so they are broad based. Poor people may be out of the net of the income tax, but they pay indirect taxes while buying goods.

6. *Influence on Pattern of Production*

By imposing taxes on certain commodities or sectors, the government can achieve better allocation of resources. For e.g. By Imposing taxes on luxury goods and making them more expensive, government can divert resources from these sectors to sector producing necessary goods.

7. *May not affect motivation to work and save*

The indirect taxes may not affect the motivation to work and to save. Since, most of the indirect taxes are not progressive in nature, individuals may not mind to pay them. In other words, indirect taxes are generally regressive in nature. Therefore, individuals would not be demotivated to work and to save, which may increase investment.

8. *Social Welfare*

The indirect taxes promote social welfare. The amount collected by way of taxes is utilized by the government for social welfare activities, including education, health and family welfare.

Secondly, very high taxes are imposed on the consumption of harmful products such as alcoholic products, tobacco products, and such other products. So it is not only to check their consumption but also enables the state to collect substantial revenue in this manner.

9. Flexibility and Buoyancy

The indirect taxes are more flexible and buoyant. Flexibility is the ability of the tax system to generate proportionately higher tax revenue with a change in tax base, and buoyancy is a wider concept, as it involves the ability of the tax system to generate proportionately higher tax revenue with a change in tax base, as well as tax rates.

Disadvantages / Demerits of Indirect Taxes

Although indirect taxes have become quite popular in both developed & Under developed countries alike, they suffer from various demerits, of which the following are important.

1. High Cost of Collection

Indirect tax fails to satisfy the principle of economy. The government has to set up elaborate machinery to administer indirect taxes. Therefore, cost of tax collection per unit of revenue raised is generally higher in the case of most of the indirect taxes.

2. Increase income inequalities

Generally, the indirect taxes are regressive in nature. The rich and the poor have to pay the same rate of indirect taxes on certain commodities of mass consumption. This may further increase income disparities among the rich and the poor.

3. Affects Consumption

Indirect taxes affects consumption of certain products. For instance, a high rate of duty on certain products such as consumer durables may restrict the use of such products. Consumers belonging to the middle class group may delay their purchases, or they may not buy at all. The reduction in consumption affects the investment and production activities, which in turn hampers economic growth.

4. Lack of Social Consciousness

Indirect taxes do not create any social consciousness as the taxpayers do not feel the burden of the taxes they pay.

5. Uncertainty

Indirect taxes are often rather uncertain. Taxes on commodities with elastic demand are particularly uncertain, since quantity demanded will greatly affect as prices go up due to the imposition of tax. In fact a higher rate of tax on a particular commodity may not bring in more revenue.

6. *Inflationary*

The indirect taxes are inflationary in nature. The tax charged on goods and services increase their prices. Therefore, to reduce inflationary pressure, the government may reduce the tax rates, especially, on essential items.

7. *Possibility of tax evasion*

There is a possibility of evasion of indirect taxes as some customers may not pay indirect taxes with the support of sellers. For instance, individuals may purchase items without a bill, and therefore, may not pay Sales tax or VAT (Value Added Tax), or may obtain the services without a bill, and therefore, may evade the service tax.

Conclusion on Indirect taxes:

Elaborate analysis of merits and demerits of direct and indirect taxes makes it clear that whereas the direct taxes are generally progressive, and the nature of most indirect taxes is regressive. The scope of raising revenue through direct taxation is however limited and there is no escape from indirect taxation in spite of attendant problems. There is common agreement amongst economists that direct & indirect taxes are complementary and therefore in any rational tax structure both types of taxes must find a place.

7.8 OBJECTIVES OF TAXATION

The first and the foremost objective of taxation is to raise revenue so as to meet huge public expenditure. Most of the governmental activities are financed by taxation. Taxation policy has some non-revenue objectives also. In the modern economies, taxation is used as an instrument of economic policy. It affects overall economic activities such as total volume of production, consumption, investment, balance of payments, income distribution etc.

1. Economic Development: It is one of the important objectives of taxation. Economic development of any country is largely depend on the growth of capital formation and most of the developing and underdeveloped countries suffer from the shortage of capital. For rapid economic development a rapid capital accumulation is required. With proper taxation policy and planning, raising the existing rate of taxes or by imposing new taxes may lead to increase in revenue for capital formation. Due care is required to be taken while making use of these revenue. The tax policy has to be employed in such a way that investment occurs in the productive sectors of the economy, including the infrastructural sectors.

2. Full Employment : Economic development with full employment of resources is the second objective. To achieve this objective the rates of taxes must be reduced so as to increase level of employment through

effective demand. It stimulates further investment which in turn results in rise in income and employment through the multiplier mechanism.

7. Price Stability :Thirdly, an effective tax policy ensures price stability in an economy by controlling inflation. Increase in direct taxes help to control private spending so that prices of the commodities remains stable. Increase in indirect taxes on commodities may lead to inflationary tendencies. To maintain price stability with effective use of taxes is therefore necessary for smooth economic development of the country.

4. Control of Cyclical Fluctuations :Fourthly, to control cyclical / periodic fluctuations occurred due to trade cycles is another objective of taxation policy. Generally during depression, taxes are cut down to motivate demand and investment while during boom taxes are increased so that cyclical fluctuations are tamed.

5. Reduction of BOP Difficulties : Indirect taxes like custom duties are used to control imports of certain goods with the objective of reducing the burden of balance of payments and to encourage domestic production of import substitutes.

6. Non-Revenue Objective : One of the important non-revenue objective of taxation is the reduction of inequalities in income and wealth distribution. It can be done by taxing the rich at higher rate than the poor through the system of progressive taxation.

7.9 TAX BASE AND RATES OF TAXATION

Tax base can be defined as the total amount of assets or revenue on which the government can levy a tax. For example, in the case of income tax, the tax base is all the income earned by the people. In the case of property taxes, the tax base is the total value of the property, which changes hands in a given period of time. Therefore, the tax base is the number to which a percentage rate is applied to reach the actual amount of the tax that needs to be paid. For example, if a 30% tax has to be applied to Rs.100000/- income, then the Rs.100000/- is the tax base.

There are different types of taxes that have many different types of tax bases.

7.9.1 Types of Tax Bases:

1. Value-Based: It is the most commonly used type of tax base. It is used in taxes, such as income tax and sales tax. If the value of the tax base increases, the amount of tax collected will also increase. For example, if the salary of a person increases from Rs.100000/- to Rs.200000/- and if the tax base remains the same, then the amount of tax collected will also increase. Such kind of tax base is also referred to as ad-valorem.

2. Quantity Based: There are certain other types of taxes, such as excise, where taxes are levied on per unit of goods produced. Hence, if 100 units are produced at Rs.10/- or 100 units are produced at Rs.20/-, the tax will remain the same since the base is the number of units, which is 100. Therefore, rising inflation will not have any effect on taxes in such cases.

3. Market-Based: The true value of many goods and services are difficult to determine. Therefore, in the case of property taxes, people tend to show a lower value to the government as compared to the value at which the transaction has actually taken place. In such cases, to protect the interest of the people the government decides the circle rates which are used to derive the tax base instead of the market price. This is because the market price is subject to manipulation.

4. Broad-Based: It is the one that applies to a lot of items such as sales tax or excise. Therefore, computing these tax bases is quite complex or difficult. Such type of broad based taxes will not discriminate between different forms of activities.

5. Narrow Based: Unlike broad based taxes these taxes are one which applies only to a few items such as housing. Therefore determining and managing their tax base is relatively easy. Necessary items such as food are excluded from the tax base in order to make the tax less regressive.

7.9.2 Rates of taxation

The tax structure of an economy depends on its tax base, tax rate, and how the tax rate varies accordingly. The tax base is the amount to which a tax rate is applied. The tax rate is the percentage of the tax base that must be paid in taxes. To calculate taxes, it is necessary to know the tax base and the tax rate. If the tax base equals Rs.100/- and the tax rate is 9%, then the tax will be Rs.9 ($=100 \times 0.09$).

1. Proportional taxes : Also known as flat rate taxes. The same tax rate is applied to any income level, or for any size tax base. For e.g. Mr. X earns Rs.50,000/- and Mr. Y earns Rs.100,000/- and the tax rate is 10%, then Mr. X will have to pay Rs.5,000/- while Mr. Y will have to pay Rs.10,000/- towards taxes. In many countries almost all sales taxes, social security and medicare taxes are proportional taxes.

2. Regressive taxes : A regressive tax is higher for lower income groups. Regressive taxes especially hurt the poor. The inequitable effects of regressive or proportional taxes are often mitigated by payments to the poor and by exempting essential products and services, such as food, from regressive and proportional taxes.

7. Progressive taxes : In case of progressive taxes a higher tax rate is applied to higher income groups. For e.g. if the tax rate on Rs.50,000/- is 10% and 20% for Rs.100,000/-, then, continuing the above example, Mr. X still will have to pay Rs.5,000/- while Mr. Y must pay Rs.20,000/-

towards taxes. However, almost all progressive taxes are structured as a marginal tax, meaning that the progressive tax rate only applies to that part of the income exceeding a certain amount. The portion of the tax base subject to a particular tax rate is known as a tax bracket which always has a lower and upper limit, except for the top tax bracket, which has no upper limit.

7.10 SUMMARY

1. Public revenue refers to the income side of the financial operations of the state. It is the revenue or income of public authorities namely central, State, Local bodies etc.
2. The main sources of public revenue are: Tax and Non-taxrevenue
7. The chief source of public revenue is Tax. To define tax, it is said that tax is a mandatory imposition of duty on public authority by government organizations to meet requirements of general public as a whole. Broad classification of taxes is: Direct and Indirect Taxes
Direct taxes
4. Non Tax Revenue comprises all revenues apart from taxes accumulated to the Government. Non tax revenues are funds that are generated from internal sources.
5. Canons of Taxation are the main basic principles (i.e. rules) set to build a 'Good Tax System'. Canons of Taxation were first originally laid down by economist Adam Smith in his famous book "The Wealth of Nations".
6. In general a good tax system should run in harmony with important national objectives and if possible should assist the society in achieving them. Thus, the good tax system should be designed so as to meet the requirements of equity in the distribution of tax burden, efficiency in the tax use, goals of macroeconomic policy and ease of administration.
7. A direct tax is one, which is paid by a person on whom it is legally imposed and the burden of which cannot be shifted to any other person. The person from whom it is collected cannot shift its burden to anybody else. The tax-payer is the tax-bearer. The impact i.e. the initial burden and its incidence i.e. the ultimate burden of direct tax is on the same person. For e.g. Income tax, wealth tax, property tax, estate duties, capital gain tax, corporate / company tax, etc. are all direct taxes.
8. An indirect tax is one in which the burden can be shifted to others. The tax payer is not the tax bearer. The impact and incidence of indirect taxes are on different persons. An indirect tax is levied on and collected from a person who manages to pass it on to some other

person or persons on whom the real burden of tax falls. For e.g. commodity taxes or sales tax, excise duty, custom duties, etc. are indirect taxes.

9. Most of the governmental activities are financed by taxation. Taxation policy has some non-revenue objectives also. In the modern economies, taxation is used as an instrument of economic policy. It affects overall economic activities such as total volume of production, consumption, investment, balance of payments, income distribution etc.
10. Tax base can be defined as the total amount of assets or revenue on which the government can levy a tax. For example, in the case of income tax, the tax base is all the income earned by the people. In the case of property taxes, the tax base is the total value of the property, which changes hands in a given period of time. Therefore, the tax base is the number to which a percentage rate is applied to reach the actual amount of the tax that needs to be paid.
11. The tax structure of an economy depends on its tax base, tax rate, and how the tax rate varies accordingly. The tax base is the amount to which a tax rate is applied. The tax rate is the percentage of the tax base that must be paid in taxes.

7.11 QUESTIONS

1. Explain the meaning and sources of public revenue.
2. Differentiate between tax and non-tax revenue.
7. Discuss Adam Smith's Canons of taxation.
4. What are the characteristics of a good tax system?
5. Discuss the merits and demerits of direct taxes.
6. Explain the advantages and disadvantages of indirect taxes.
7. What are the objectives of imposition of taxes?
8. Explain the meaning and types of tax base.
9. Explain how tax rates are applied.



SHIFTING OF TAX BURDEN

Unit Structure :

- 8.0 Objectives
- 8.1 Introduction
- 8.2 Impact, Shifting and Incidence of Tax
- 8.3 Economic Effects of Taxation
- 8.4 Introduction: Redistributive and Anti-Inflationary Nature of Taxation
- 8.5 Summary
- 8.6 Questions

8.0 OBJECTIVES

- To study the meaning of Shifting of Tax Burden and impact and incidence of taxation
- To understand various economic effects of taxation
- To understand the concepts of redistributive and anti-inflationary nature of taxation and their implications

8.1 INTRODUCTION

- **SHIFTING OF TAX BURDEN**

Incidence of taxation has got a relevance so far as the effects of taxation are concerned. Public finance operations are likely to produce various effects on the level and pattern of economic activity in country. The systems of public finance becomes acceptable to the people when public authorities try their utmost to promote and maximise the favourable effects and to check and minimise the adverse effects of Governmental budgetary operations.

As per Dr. Dalton taxation produces various effects which are as follows:-

- 1) Effect of taxation on production.
 - a) Effects of taxation on worker's ability and willingness to work
 - b) Effect of taxation on people's ability and willingness to save.
 - c) Effect of taxation on entrepreneur's willingness to take risk.

- d) Effect of taxation on resource allocation.
 - e) Effect of taxation investment.
- 2) Effect of taxation on distribution of income and wealth.

Effect of proportional, Progressive and regressive taxation on the distribution of income and wealth

- 3) Other effects of taxation on employment, structure of industry.
Tendency towards tax etc.

Besides these real effects of taxation there is also a monetary effect of taxation which is called as incidence of taxation.

Concept :-

The concept of incidence of tax is about the answer to the question as to who bears the ultimate money burden of a tax? When government imposes a tax on a person, it is quite possible that he may try to shift it to another person due to the human tendency.

When a person is taxed he may try to shift it to another person say B. If he succeeds in shifting it to Mr. B, then ultimately Mr. B will bear the money burden of a tax levied by the government on A. i.e. Mr. A recovers the tax amount from Mr. B and pays it the Government. Thus incidence of tax refers to the ultimate money burden of a tax. It also means the final resting point of a tax.

8.2 IMPACT, SHIFTING AND INCIDENCE OF TAX

These are the interrelated terms which are related to imposition, transfer and settlement of tax. Initially it is the impact that occurs first and incidence is the end result. In between these two lies the phenomenon of shifting of tax.

The impact of tax is defined as the initial, immediate and legal money burden of a tax which falls on a person on whom the tax is levied. The very intention of the government is that the man on whom the tax is levied should pay the tax. The person who is liable to pay the tax to the Government bears its impact. Impact of a tax is called immediate money burden of a tax because the moment tax gets imposed on him, he stands immediately to make the payment of the tax to Government. It is also called as initial money burden of tax because the movement a tax levied upon a person the initial money burden falls upon him though he may succeed later in shifting the tax to some other person. It is also called as a legal money burden of a tax because legally he is held responsible to bear the burden of a tax though he may pass it on to some other person. Legally he is to pay the tax to the Government.

8.2.1 SHIFTING OF A TAX

Shifting is defined as a process of transfer of money burden of tax from one person to another person. Shifting of tax takes place only in case of indirect taxes. The indirect taxes which are also known as commodity taxes like excise duty, sales tax, custom duty, etc. which can only be shifted to the third party. The direct taxes like income tax, wealth tax etc. cannot be shifted. It is because in case of direct taxes the impact and the incidence fall on the same person. Hence the direct taxes do not involve the problem of shifting. The problem of shifting arises only in case of indirect taxes because the impact of tax is on the person on whom the tax is levied and the incidence is ultimately borne by the actual user of a commodity. The tax is shifted through the vehicle of price. When a tax is imposed the price of a commodity rises because the tax gets mixed up with the price. So a consumer has to pay the gross price i.e. the price plus tax. However the tax may be shifted without raising the price also specifically in case of backward shifting.

The shifting is of two types viz.

- i) Forward shifting and
- ii) Backward shifting.

The forward shifting of a tax and the backward shifting of a tax depend upon the circumstances.

A forward shifting is one in which the tax is shifted forwardly to the ultimate users of a commodity through price i.e. the tax gets mixed up with price and the ultimate user of a commodity has to pay a gross price. So in case of forward shifting of tax price is used as a vehicle of tax shifting.

A backward shifting is one in which the tax is shifted backwardly to the grower of the raw materials. For example when an excise duty is levied on a sugar producer. A sugar producer will shift the excise duty backwardly to the growers of sugar cane by asking him to reduce the price of sugar cane which he pays for sugar production and thus by shifting the excise duty backwardly he recovers the amount of excise duty backwardly from the sugar cane grower. This is done without raising of the price of sugar. Thus price as a vehicle of tax shifting hardly plays any role so far as backward shifting is concerned.

Factors influencing shifting:-

1) Magnitude of tax:-

Magnitude means the amount or the quantum of tax. If the tax amount is very small like a few thousand rupees then the tax payer doesn't feel like shifting the tax. He feels that it is better to bear the burden of tax than to shift the tax. Conversely if the tax amount is very big which comes to crores of rupees then only the tax payer feels like shifting the tax.

2) Range of the commodities taxed:-

If exclusively one commodity is taxed then the tax payer hardly think in terms of shifting the tax. Conversely when tax is levied upon a wide varieties of goods like soft drinks. Coke, Pepsi, Limka, Fanta etc. Then the tax payer feels like shifting the tax.

3) The point of tax :-

If tax is levied at the point of a consumer then there is no possibility of tax shifting. The consumer has to bear the brunt of the attack made by a tax conversely when the tax is imposed at the point of a producer or a seller then there is a possibility of shifting of a tax.

4) Elasticity of Demand :-

When demand is perfectly elastic then tax can't be shifted. When the demand is fairly elastic then some tax can be shifted. When the demand is perfectly inelastic then the whole tax can be shifted.

5) Elasticity of supply:-

When the supply is perfectly elastic then the whole tax can be shifted. When supply is fairly elastic then tax can be shifted partially. Conversely when supply is perfectly inelastic then tax cannot be shifted.

6) Period of time:-

During short period of time it is very difficult to shift the tax. Conversely when the period is very long then only the tax can be shifted.

7) Market Situation:-

In a monopoly market situation tax can be shifted while under perfect competition in the long period there is no possibility of tax shifting.

8) Geographical coverage:-

When the geographical coverage is very narrow i.e. in case of local markets there is no possibility of shifting conversely when the geographical coverage of a market is very wide i.e. in case of national and international markets there is a possibility of shifting.

9) Public policy :-

Shifting depends upon the following Government. If the government follows the policy of controls and restriction then tax cannot be shifted. Conversely when Government follows open policy or free policy then there is a possibility of shifting.

10) Vehicle :

As per Dr. Dalton there must be some vehicle through which a tax can be shifted. Price is a good vehicle through which tax can be shifted.

8.3 ECONOMIC EFFECTS OF TAXATION

Though raising revenue is the primary objective of taxation, taxes are considered as instruments of control and regulation with the objective of influencing the pattern of consumption, production and distribution i.e. taxes affect an economy in various ways. The economic effects of taxes are explained below:

1. Effects of Taxation on Production:

Effects on production are classified under three heads

(i) Effects on the ability to work, save and invest : In case of poor people, imposition of taxes results in the reduction of disposable income or the purchasing capacity of the taxpayers. It reduces their expenditure on necessities which are required to improve work efficiency. It further adversely affects savings and investment.

Whereas imposition of taxes on rich people has the least / negligible effect on the efficiency and ability to work. There are some harmful goods, such as cigarettes, tobacco, alcohol whose consumption has to be reduced to increase ability to work. Therefore high rate of taxes are often imposed on such harmful goods to curb their consumption.

All taxes adversely affect the ability to save of all people. In case of rich people, they save more than the poor, so progressive rate of taxes reduces their savings potentiality which results in low level of investment. The lower rate of investment further adversely affect the economic growth of a country.

(ii) Effects on the will to work, save and invest :

The effects of taxation on the willingness to work, save and invest are due to the result of money burden of tax as well as the psychological burden of tax. Temporary taxes may not lead to any adverse effect on desire or will to do work but if these taxes continues to exist then they may lead to adversely affect the willingness to work. Taxpayers have a feeling that every tax is a burden. This psychological state of mind of the taxpayers has a disincentive effect on the willingness to work for more extra hours.

It is suggested that effects of taxes upon the willingness to work, save and invest depends on the income elasticity of demand and it varies from individual to individual.

If the income demand of an individual taxpayer is inelastic, a cut in income consequent upon the imposition of taxes will induce him to work more and to save more so that the lost income is at least partially recovered. On the other hand, the desire to work and save of those people whose demand for income is elastic will be affected adversely.

(iii) Effects on the allocation of resources :

In economics resources have several uses. By diverting resources use to the desired directions, taxation can influence the volume and the size of production in the economy. It may lead to some beneficial effects on production. High rates taxation on harmful drugs and commodities will reduce their consumption. It will discourage production of these commodities and these scarce resources will be diverted from their production to the other products which are useful for economic growth. Taxation may also promote regional balanced development by allocating resources in the backward regions.

2. Effects of Taxation on Income Distribution and wealth:

Taxation affect favorably as well as unfavorably on the distribution of income and wealth. It depends on the type and rates of taxation. A steeply progressive taxation system tends to reduce income inequality since the burden of such taxes falls heavily on the richer persons.

As against the progressive taxation, regressive tax system increases the inequality of income and distribution of wealth. Taxes imposed heavily on luxury and non-essential goods tend to have a favorable impact on income distribution. Whereas taxes imposed on necessary articles may have regressive effect on income distribution.

Though the progressive system of taxation has favorable effect on income distribution but it has disincentive effect on output as rich people are heavily taxed it leads to disincentive effect on savings and investment. A high rate of income tax will reduce inequalities but it may lead to some unfavorable effects on the ability to work, save, investment and output.

3. Other Effects of Taxation:

i) As taxes have favorable effects on the ability and the desire to work, save and invest, it may lead to a favorable effect on the employment situation of a country. If resources collected through taxes are utilized for development projects, it will increase employment rate in the economy. As against this if taxes affect the volume of savings and investment adversely then recession and unemployment problem will arise.

ii) Effect of taxes on the price level may have favorable as well as unfavorable effect. Sometimes, taxes are imposed to curb inflation which may lead to rising costs of production. It will further aggravate the problem of inflation.

In this way, taxation creates both favorable and unfavorable effects on various ways in an economy.

8.4 INTRODUCTION: REDISTRIBUTIVE AND ANTI-INFLATIONARY NATURE OF TAXATION

Taxes seem to have the greatest anti-inflationary effects. However, the effectiveness of taxes depend not only on the individual taxes but also on the overall tax structure.

A tax on personal income reduces inflationary pressures by reducing people's disposable income. It does have a minimum effect on business cost, except to the extent that reductions in disposable income lead trade unions to demand wage increases.

On the contrary, it does not place a burden on persons who do not fall under the tax net or who are able to evade taxes or who spend huge sums from accumulated wealth. Moreover, a major portion of the tax may be absorbed from savings and thus it may give no direct incentive to curtail spending. Thus, its anti-inflationary effect will be less per rupee than that of a tax on spending.

Consequently, "if given inflationary pressures are to be checked by the use of income-tax increases, the tax rates must be higher than they would need to be with a tax having a greater effect in curtailing spending. Accordingly, the adverse effect on incentives to work and produce will be somewhat greater."

Excise duty and sales tax affect inflationary pressures in a different way. Demand-shifting excise are designed to discourage persons from buying particularly scarce commodities. The tax acts as an alternative to the rationing system. The policy will prove to be effective only if the demand for the product is fairly elastic.

Contrarily, demand-absorbing excise are levied upon commodities having inelastic purchasing power that would otherwise be used for inflationary spending. However, the fact is that most commodities of inelastic demand are of widespread use and the burden of tax will be distributed in a regressive manner (i.e., the poor will pay more than the rich).

However, income-tax on companies may be raised to control inflation. Such a tax is deflationary in two ways. First, to the extent that dividends are reduced, individual spending is curtailed, at least partly. Secondly, business firms are left with less funds for expansion and so they must reduce their investment spending.

8.4.1 ANTI - INFLATIONARY NATURE OF TAXATION

In modern welfare states, the government has to incur huge expenditure to meet the growing social and economic needs of the people. In such a situation, taxation becomes an important source of funding such expenditure. Therefore taxation plays a very important role in modern economies. Through taxation, on one hand, the government control private

consumption in order to make resources available to meet collective needs of the people and on the other hand, taxation is used to redistribute income and wealth.

In the growing economies with the huge amount of public expenditure, there is always the possibility of inflation due to excessive consumption. In such cases, anti-inflationary taxation is used to reduce propensity to consume. It is in the form of higher rates of direct and indirect taxes. Anti-inflationary taxation which reduces consumption is justified if the resources released from private consumption are used by the government for welfare activities of the society at large.

The redistributive taxation like progressive direct taxes is designed to reduce savings, whereas anti-inflationary taxes are designed to reduce consumption. When the government uses taxation to reduce savings, the funds raised from such taxes are the funds which might have been left idle by the people. But in case of anti-inflationary taxation used to reduce consumption, the resources raised by the government are the funds that people would otherwise have used for consumption. Therefore funds raised through anti-inflationary taxation should be used wisely and productively.

The general classical view is that the all taxes are anti-inflationary and all public expenditures are inflationary in nature. Whereas, Modern economists believe that neither all taxes are anti-inflationary nor expenditures are inflationary. The effects of taxation and public expenditure depend on the state of the economy. During normal situations, any tax that reduces consumption and promote investment may be anti-inflationary.

8.4.2 REDISTRIBUTIVE NATURE OF TAXATION

Classical economists considered taxation as a means to raise revenue. But modern economists consider taxation as a tool for redistributing income and wealth among the various sections of society. Modern economists are of the opinion that taxation can be used for transferring income and wealth from the rich to the poor. This is referred to as redistributive taxation. Redistributive taxation aimed at reducing savings of the rich and using these resources raised to increase the consumption of the poor.

Unequal distribution of income and wealth harms the economy in many ways. It widens the gap between the rich and the poor which is not only socially undesirable, but is also harmful for the economy's growth. Income inequality reduces average propensity to consume and may lead to depression and unemployment. Therefore, modern economists have recommended the use of taxation to redistribute income and wealth in a more socially desirable manner. Most economies use progressive taxation to redistribute income and wealth. Progressive taxes are generally imposed in proportion of income and wealth. They impose a heavier burden on the rich than the poor.

A redistributive fiscal policy includes progressive direct taxation and public expenditure on social security, job creation and promotion of social equity. Such expenditure are in the form of old age pensions, unemployment allowances, free and subsidized housing, education, health care and food distribution. All these are aimed at reducing people's cost of living, increasing their capacity to consume and provide social justice

Redistributive taxation increases people's average propensity to consume. When income distribution improves due to transfer of income from the rich to the poor, larger number of people can increase their consumption levels. It increases aggregate demand and leads to increase investment and employment.

However, highly progressive direct taxes have certain limitations. They result in tax evasion, which gives rise to black money in an economy. At the same time, such taxes can adversely affect people's willingness and ability to work, save and invest. This can also harm economic progress.

Another limitation of redistributive taxation is that often government use the redistributive fiscal policy to fulfil their political agenda of winning elections by providing subsidies and transfers to a very large extent. This can result in excessive consumption, causing inflation and lowering the value of money. Such a fiscal policy may result in large deficit and public borrowing, pushing interest rates upward. High interest and high inflation will harm growth prospects of the economy.

Developing economies tend to rely on the indirect taxation of domestic and imported goods and services. Indirect taxes are said to be regressive because they adversely affect consumption rather than income, and wealthier people save a higher proportion of their income. In addition, indirect taxation in developing economies may even increase poverty depending on the structure of tax rates and the consumption basket of households at various rungs of the income scale. Lowering taxes on goods such as food that weigh more in the budget of poor people achieves relatively little redistribution because wealthier people also consume these goods.

8.5 SUMMARY

1. Incidence if taxation has got a relevance so far as the effects of taxation are concerned. Public finance operations are likely to produce various effects on the level and pattern of economic activity in country. The systems of public finance becomes acceptable to the people when public authorities try their utmost to promote and maximise the favourable effects and to check and minimise the adverse effects of Governmental budgetary operations.

2. The impact of tax is defined as the initial, immediate and legal money burden of a tax which falls on a person on whom the tax is levied. The very intention of the government is that the man on whom the tax is levied

should pay the tax. The person who is liable to pay the tax to the Government bears its impact.

3. Incidence of tax refers to the ultimate money burden of a tax. It also means the final resting point of a tax.

8. Shifting is defined as a process of transfer of money burden of tax from one person to another person. Shifting of tax takes place only in case of indirect taxes. The indirect taxes which are also known as commodity taxes like excise duty, sales tax, custom duty, etc. which can only be shifted to the third party.

5. Impact, shifting and incidence are the interrelated terms which are related to imposition, transfer and settlement of tax. Initially it is the impact that occurs first and incidence is the end result. In between these two lies the phenomenon of shifting of tax.

6. The shifting is of two types viz.

- i) Forward shifting and
- ii) Backward shifting.

A forward shifting is one in which the tax is shifted forwardly to the ultimate users of a commodity through price i.e. the tax gets mixed up with price and the ultimate user of a commodity has to pay a gross price. So in case of forward shifting of tax prices is used as a vehicle of tax shifting.

A backward shifting is one in which the tax is shifted backwardly to the grower of the raw materials.

7. Though raising revenue is the primary objective of taxation, taxes are considered as instruments of control and regulation with the objective of influencing the pattern of consumption, production and distribution i.e. taxes affect an economy in various ways.

8. Taxes seem to have the greatest anti-inflationary effects. However, the effectiveness of taxes depend not only on the individual taxes but also on the overall tax structure.

9. Taxation plays a very important role in modern economies. Through taxation, on one hand, the government control private consumption in order to make resources available to meet collective needs of the people and on the other hand, taxation is used to redistribute income and wealth.

10. The redistributive taxation like progressive direct taxes is designed to reduce savings, whereas anti-inflationary taxes are designed to reduce consumption.

8.6 QUESTIONS

1. Explain the meaning of the concepts of impact, shifting and incidence of a tax.
2. Discuss the factors influencing shifting of tax.
3. What are the various economic effects of taxation?
8. Explain anti-inflationary and redistributive nature of taxation.



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PUBLIC EXPENDITURE AND PUBLIC DEBT

Unit Structure

- 9.0 Objectives
- 9.1 Introduction
- 9.2 Classification of Public Expenditure
- 9.3 Canons of Public Expenditure
- 9.4 Effects of Public Expenditure
- 9.5 Adolph Wagner's Law of Increasing State Activity
- 9.6 The Peacock-Wiseman Hypothesis
- 9.7 Causes of Public Expenditure Growth
- 9.8 Significance of Public Expenditure
- 9.9 Summary
- 9.10 Questions

9.0 OBJECTIVES

- To understand the meaning of public expenditure
- To study classification of public expenditure
- To study canons of public expenditure
- To understand the economic effects of public expenditure on production, consumption, distribution, employment and stabilization
- To study Wagner's hypothesis and Wiseman Peacock hypothesis
- To understand the causes of increasing public expenditure
- To study the significance of public expenditure

9.1 INTRODUCTION

1. Public Expenditure : Meaning & Definition

Public expenditure refers to Government expenditure i.e. Government spending. It is incurred by Central, State and Local governments of a country. **Public expenditure can be defined as, "The expenditure incurred by public authorities like central, state and local governments to satisfy the collective social wants of the people is known as public expenditure."**

The Public Expenditure is incurred on various activities for the welfare of the people and also for the economic development, especially in developing countries. In other words The Expenditure incurred by Public authorities like Central, State and local governments to satisfy the collective social wants of the people is known as public expenditure.

2. Need / Importance / Significance of Public :

In modern economic activities public expenditure has to play an important role. It helps to accelerate economic growth and ensure economic stability. Public Expenditure can promote economic development as follows :-

1. To promote rapid economic development.
2. To promote trade and commerce.
3. To promote rural development
4. To promote balanced regional growth
5. To develop agricultural and industrial sectors
6. To build socio-economic overheads eg. roadways, railways, power etc.
7. To exploit and develop mineral resources like coal and oil.
8. To provide collective wants and maximise social welfare.
9. To promote full - employment and maintain price stability.
10. To ensure an equitable distribution of income.

Thus public expenditure has to create and maintain conditions conducive to economic development. It has to improve the climate for investment. It should provide incentives to save, invest and innovate.

3. Objectives of Public Expenditure :

The major objectives of public expenditure are

- 1) Administration of law and order and justice.
- 2) Maintenance of police force.
- 3) Maintenance of army and provision for defence goods.
- 4) Maintenance of diplomats in foreign countries.
- 5) Public Administration.
- 6) Servicing of public debt.
- 7) Development of industries.
- 8) Development of transport and communication.
- 9) Provision for public health.
- 10) Creation of social goods.

In a modern welfare state, the importance of public expenditure has increased. Throughout the 19th Century, most governments followed laissez faire economic policies & their functions were only restricted to defending aggression & maintaining law & order. The size of public expenditure was very small. But now the expenditure of governments all over has significantly increased. In the early 20th Century, John Maynard Keynes advocated the role of public expenditure in determination of level of income and its distribution.

In developing countries, public expenditure policy not only accelerates economic growth & promotes employment opportunities but also plays a useful role in reducing poverty and inequalities in income distribution.

9.2 CLASSIFICATION OF PUBLIC EXPENDITURE

Classification of Public expenditure refers to the systematic arrangement of different items on which the government incurs expenditure. Different economists have looked at public expenditure from different point of view. The following classification is based on these different views.

A. Functional Classification:

Some economists classify public expenditure on the basis of functions for which they are incurred. The government performs various functions like defence, social welfare, agriculture, infrastructure and industrial development. The expenditure incurred on such functions fall under this classification. These functions are further divided into subsidiary functions. This kind of classification provides a clear idea about how the public funds are spent.

B. Revenue and Capital Expenditure :

Revenue expenditure are current or consumption expenditures incurred on civil administration, defence forces, public health and education, maintenance of government machinery. This type of expenditure is of recurring type which is incurred year after year.

On the other hand, capital expenditures are incurred on building durable assets, like highways, multipurpose dams, irrigation projects, buying machinery and equipment. They are non recurring type of expenditures in the form of capital investments. Such expenditures are expected to improve the productive capacity of the economy.

C. Transfer and Non-Transfer Expenditure :

A.C. Pigou, the British economist has classified public expenditure as :-

1. Transfer expenditure
2. Non-transfer expenditure

1. Transfer Expenditure :-

Transfer expenditure relates to the expenditure against which there is no corresponding return.

Such expenditure includes public expenditure on :-

1. National Old Age Pension Schemes,
2. Interest payments,
3. Subsidies,
4. Unemployment allowances,
5. Welfare benefits to weaker sections, etc.

By incurring such expenditure, the government does not get anything in return, but it adds to the welfare of the people, especially belong to the weaker sections of the society. Such expenditure basically results in redistribution of money incomes within the society.

2. Non-Transfer Expenditure :-

The non-transfer expenditure relates to expenditure which results in creation of income or output. The non-transfer expenditure includes development as well as non-development expenditure that results in creation of output directly or indirectly. Economic infrastructure such as power, transport, irrigation, etc.

1. Social infrastructure such as education, health and family welfare.
2. Internal law and order and defence.
3. Public administration, etc.

By incurring such expenditure, the government creates a healthy conditions or environment for economic activities. Due to economic growth, the government may be able to generate income in form of duties and taxes.

D. Productive and Unproductive Expenditure :

This classification was made by Classical economists on the basis of creation of productive capacity.

1. Productive Expenditure :-

Expenditure on infrastructure development, public enterprises or development of agriculture increase productive capacity in the economy and bring income to the government. Thus they are classified as productive expenditure.

2. Unproductive Expenditure :-

Expenditures in the nature of consumption such as defence, interest payments, expenditure on law and order, public administration, do not create any productive asset which can bring income or returns to the government. Such expenses are classified as unproductive expenditures.

E. Development and Non-Development Expenditure :

Modern economists have modified this classification into distinction between development and non-development expenditures.

1. Development Expenditure :-

All expenditures that promote economic growth and development are termed as development expenditure. These are the same as productive expenditure.

2. Non-Development Expenditure :-

Unproductive expenditures are termed as non development expenditures.

F. Grants and Purchase Price :

This classification has been suggested by economist **Hugh Dalton**.

1. Grants :-

Grants are those payments made by a public authority for which there may not be any quid-pro-quo, i.e., there will be no receipt of goods or services. For example, old age pension, unemployment benefits, subsidies, social insurance, etc. Grants are transfer expenditures.

2. *Purchase prices :-*

Purchase prices are expenditures for which the government receives goods and services in return. For example, salaries and wages to government employees and purchase of consumption and capital goods.

G. Classification According to Benefits :

Public expenditure can be classified on the basis of benefits they confer on different groups of people.

1. **Common benefits to all** : Expenditures that confer common benefits on all the people. For example, expenditure on education, public health, transport, defence, law and order, general administration.
2. **Special benefits to all** : Expenditures that confer special benefits on all. For example, administration of justice, social security measures, community welfare.
3. **Special benefits to some** : Expenditures that confer direct special benefits on certain people and also add to general welfare. For example, old age pension, subsidies to weaker section, unemployment benefits.

H. Hugh Dalton's Classification of Public Expenditure

Hugh Dalton has classified public expenditure as follows :-

1. **Expenditures on political executives** : i.e. maintenance of ceremonial heads of state, like the president.
2. **Administrative expenditure** : to maintain the general administration of the country, like government departments and offices.
3. **Security expenditure** : to maintain armed forces and the police forces.
4. **Expenditure on administration of justice** : include maintenance of courts, judges, public prosecutors.
5. **Developmental expenditures** : to promote growth and development of the economy, like expenditure on infrastructure, irrigation, etc.
6. **Social expenditures** : on public health, community welfare, social security, etc.
7. **Public debt charges** : include payment of interest and repayment of principle amount.

9.3 CANONS OF PUBLIC EXPENDITURE

The expression canon of public expenditure is used for the fundamental rules or principles governing the spending policy of the government. Findlay Shirras has suggested Four Canons of Public Expenditure viz.

- 1) Canon of benefit
- 2) Canon of economy
- 3) Canon of Sanction
- 4) Canon of Surplus.

Other economists have also suggested certain canons such as

- 5) Canon of economic growth
- 6) Canon of productivity
- 7) Canon of elasticity
- 8) Canon of equitable distribution

1) Canon of benefit : This canon implies that public expenditure should be incurred in a such way that it promotes maximum social advantage. The ultimate purpose of public expenditure should be social benefit. Hence public expenditure should be directed to those areas which maximise the benefits of the society as a whole and not as an individual group.

2) Canon of economy : Public expenditure should be productive and efficient. It should be incurred economically avoiding extravagance and wastes. It should avoid duplication and involve minimum cost. It should be incurred on essential items of common benefit. It should ensure optimum utilisation of resources.

3) Canon of sanction: All public expenditures should be incurred after the approval of a proper authority. This sanction is required for proper allocation of resources and to avoid the misuse of funds. The expenditures must be audited to ensure that money is spent for the purpose for which it is sanctioned.

4) Canon of Surplus: This principle implies that the government should create a surplus in budget and avoid deficit. An ideal budget is one which contains a surplus by keeping the public expenditure below public revenue. This ensures the credit worthiness of the government.

5) Canon of economic growth: Growth with stability is an important objective which governs public expenditure. Developed countries can maintain the present high rate of economic growth and under-developed countries can focus on raising the growth rate and attainment of a higher standard of living through public expenditure.

6) Canon of Productivity : Public expenditure must be productive so that income and employment can be generated. A large part of public expenditure should be allocated for developmental purpose.

7) Canon of elasticity : This canon implies that the government spending policy should be fairly elastic according to the changes in the circumstances and requirement of the economy.

8) Canon of equitable distribution: Public expenditure policy of the government should aim at reducing inequalities of income and wealth in the economy. Thus the expenditure policy should provide maximum benefits for the weaker sections of the society.

9.4 EFFECTS OF PUBLIC EXPENDITURE

A. Effects on Production

The effect of public expenditure on production can be examined with reference to its effects on ability & willingness to work, save & invest and on diversion of resources.

1. Ability to work, save and invest : Socially desirable public expenditure increases community's productive capacity. Expenditure on education, health, communication, increases people's productivity at work and therefore their incomes. With rise in income savings also increase and this in turn has a beneficial effect on investment and capital formation.

2. Willingness to work, save and invest : Public expenditure, sometimes, brings adverse effects on people's willingness to work and save. Government expenditure on social security facilities may bring such unfavourable effects. For e.g. Government spends a considerable portion of its income towards provision of social security benefits such as unemployment allowances old age pension, insurance benefits, sickness benefit, medical benefit, etc. Such benefits reduce the desire to work. In other words they act as disincentive to work.

3. Effect on allocation of resources among different industries & trade : Many a times the government expenditure proves to be an effective instrument to encourage investment on a particular industry. For e.g. If government decides to promote exports, it provides benefits like subsidies, tax benefits to attract investment towards such industry. Similarly government can also promote a particular region by providing various incentives for those who make investment in that region.

B. Effects on Distribution

The primary aim of the government is to maximise social benefit through public expenditure. The objective of maximum social welfare can be achieved only when the inequality of income is removed or minimised. Government expenditure is very useful to fulfill this goal. Government

collects excess income of the rich through income tax and sales tax on luxuries. The funds thus mobilised are directed towards welfare programmes to promote the standard of poor and weaker section. Thus public expenditure helps to achieve the objective of equal distribution of income.

Expenditure on social security & subsidies to poor are aimed at increasing their real income & purchasing power. Public expenditure on education, communication, health has a positive impact on productivity of the weaker section of society, thereby increasing their income earning capacity.

C. Effects on Consumption

Public expenditure enables redistribution of income in favour of poor. It improves the capacity of the poor to consume. Thus public expenditure promotes consumption and thereby other economic activities. The government expenditure on welfare programmes like free education, health care and housing certainly improves the standard of the poor people. It also promotes their capacity to consume and save.

D. Effects on Economic Stability

Economic instability takes the form of depression, recession and inflation. Public expenditure is used as a mechanism to control instability. The modern economist Keynes advocated public expenditure as a better device to raise effective demand & to get out of depression. Public expenditure is also useful in controlling inflation & deflation. Expansion of Public expenditure during deflation & reduction of public expenditure during inflation control money supply & bring price stability.

E. Effects on Economic Growth

The goals of planning are effectively realized only through government expenditure. The government allocates funds for the growth of various sectors like agriculture, industry, transport, communications, education, energy, health, exports, imports, with a view to achieve impressive growth.

Government expenditure has been very helpful in maintaining balanced economic growth. Government takes keen interest to allocate more resources for development of backward regions. Such efforts reduce regional inequality and promotes balanced economic growth.

Conclusion

Modern economies have all experienced tremendous growth in public expenditure. So it is absolutely necessary for governments to formulate rational public expenditure policies in order to achieve the desired effects on income, distribution, employment and growth.

9.5 ADOLPH WAGNER'S LAW OF INCREASING STATE ACTIVITY

Adolph Wagner, the German economist made an in depth study relating to rise in government expenditure in the late 19th century. Based on his study, he propounded a law called "The Law of Increasing State Activity".

Wagner's law states that "as the economy develops over time, the activities and functions of the government increase". According to Adolph Wagner, "Comprehensive comparisons of different countries and different times show that among progressive peoples (societies), with which alone we are concerned; an increase regularly takes place in the activity of both the Central Government and Local Governments, constantly undertake new functions, while they perform both old and new functions more efficiently and more completely. In this way economic needs of the people to an increasing extent and in a more satisfactory fashion, are satisfied by the Central and Local Governments."

Wagner's Statement Indicates Following Points

1. In Progressive societies, the activities of the central and local government increase on a regular basis.
2. The increase in government activities is both extensive and intensive.
3. The governments undertake new functions in the interest of the society.
4. The old and the new functions are performed more efficiently and completely than before.
5. The purpose of the government activities is to meet the economic needs of the people.
6. The expansion & intensification of government function & activities lead to increase in public expenditure.
7. Though Wagner studied the economic growth of Germany, it applies to other countries too both developed and developing.

9.6 THE PEACOCK-WISEMAN HYPOTHESIS

Peacock and Wiseman conducted a new study based on Wagner's Law. They studied the public expenditure from 1891 to 1955 in U.K. They found out that Wagner's Law is still valid.

Peacock and Wiseman further stated that :-

1. "The rise in public expenditure greatly depends on revenue collection. Over the years, economic development results in substantial revenue to the governments, this enabled to increase public expenditure".

2. There exists a big gap between the expectations of the people about public expenditure and the tolerance level of taxation. Therefore, governments cannot ignore the demands made by people regarding various services, especially, when the revenue collection is increasing at constant rate of taxation.
3. They further stated that during the times of war, the government further increases the tax rates, and enlarges the tax structure to generate more funds to meet the increase in defence expenditure. After the war, the new tax rates and tax structures may remain the same, as people get used to them. Therefore, the increase in revenue results in rise in government expenditure.

Wagner's law and Peacock-Wiseman hypothesis emphasize on the fact that public expenditure has tendency to increase overtime.

9.7 CAUSES OF PUBLIC EXPENDITURE GRWOTH

There has been a persistent and continuous increase in public expenditure in countries all over the world. The classical ideology of keeping the government spending at the lowest possible level has lost its appeal in the modern days. According to Adolf Wagner a German economist, there is a continuous tendency of the intensive and extensive and increase in the functions of the government. New functions are continuously being undertaken and old function are being performed more efficiently and on a large scale.

This observations of Wagner, popularly known as 'Wagner's Law' is universally valid. Wagner argued that there exists a direct functional relationship between the activities of the state and the size of public expenditure. Along with the growth of the economy the government activities grow faster.

Thus Wagner's law reveals an universally true inductive generalization about the continuous and substantial growth of public expenditure. Following factors are responsible for such tremendous and continuous increase in spending of modern governments.

1. **Acceptance of welfare state:** The concept of welfare state has been accepted by all the governments the world over. The adoption of welfare state has multiplied the responsibility of the government. In a welfare state the role of government has significantly widened. In fact there is hardly any field of economic activity in which the government is not concerned directly or indirectly. Huge expenditure has to be incurred by the government on welfare items like education, public health, social security measures like old age persons, unemployment allowances, subsidies, etc. In short the acceptance of welfare state has brought about a change in the attitude of the government towards Public expenditure which has grown many times.

2. **Impact of Great Depression:** The great Depression of 1930, has widened the economic role of the government. In order to rectify the bad effects of the depression such as unemployment, investment deficiency, etc. the government has to play an active role in stabilising the economic activity. Thus to fight the depression government is required to incur huge expenditure.

3. **Defence expenditure :** Defence has been a traditional function of the government. In modern times there is qualitative and quantitative changes in the expenditure on defence. Such expenditure has to be incurred not only during war time but also during peace time. All the countries have always to remain ready for any emergency. Naturally, huge expenditure becomes inevitable. If the actual war breaks up there is further manifold increase in this expenditure. Above all modern wars have become a costly affair. Increasing amounts have to be spent on modern weapons and other requirements. The war arms-race among the countries of the world causes limitless expansion of expenditure on defence.

4. **Democratic Institutions:** Democracy is a costly affair as the government has to spend huge amounts on various institutions to ensure smooth functioning of the system. There is a chain of such institutions right from village gram panchayats to the central government at the national level. Large amount becomes necessary for conducting periodical elections, allowances of elected representative etc. Further expenditure has to be incurred on constitutional posts. The acceptance of democracy is one of the causes of growth of public expenditure.

9. **Growing population:** A high growth of population naturally calls for increase in public expenditure as all state function are to be performed more extensively. Rising population also poses various problems in poor countries. The government will have the added responsibility of solving such problems as food, unemployment, housing, and sanitation. Further over-populated countries like India will have to check the population growth. Therefore the government has to spend more and more on family planning campaigns every year.

6. **Urbanisation :** The spread of urbanization is an important factor leading to the relative growth of public expenditure in modern times. With the growth of urban areas, there has been an increasing tendency of expenditure on civil administration. Expenses on water supply, electricity, provision of transport, maintenance of roads schools and colleges, traffic controls, public health, parks and libraries, playgrounds etc. have increased enormously in these days. Likewise, the expenditure on courts prisons etc. is increasing especially in urban areas.

7. **Development project:** In an underdeveloped country, the government has to spend more and more on developmental projects, especially in rural areas. It has to undertake schemes like community development projects

and other social measures for rural development. Huge investment has to be incurred on infrastructure and basic industries for rapid economic development of a country. This has increased the public expenditure.

8. Rising Prices: Inflationary tendencies have become a common feature of the post world war. The government is required to spend increasing amounts on completion of the existing projects and on new ones. During inflation the government has to play additional D.A. to the employees which obviously calls for an extra burden on public expenditure. Thus inflationary price rise is one of the important factors that leads to growth of public expenditure.

10. Public Borrowing : To finance the development projects the government has to borrow internally as well as externally. Interest payment and servicing of these debts along with repayment of the principle has increasing the expenditure of modern governments

Thus the various factors like extension of traditional functions, acceptance of new functions and increasing importance of government in economic activities have caused increase in public expenditure.

9.8 SIGNIFICANCE OF PUBLIC EXPENDITURE

The significance of the public expenditure arises from the fact that those services are provided by the government which might not otherwise be provided in significant amount by private expenditure.

In the 1930s, J. M. Keynes emphasized the importance of public expenditure. The modern state is described as the '**welfare state**'. As a result, the Modern governments are undertaking various social and economic activities.

i. Economic Development:

Public expenditure has the expansionary effect on the growth of national income, employment opportunities, etc. Economic development also requires development of economic infrastructures. A developing country like India must undertake various projects, like road-bridge-dam construction, power plants, transport and communications, etc. These social overhead capital or economic infrastructures are of crucial importance for accelerating the pace of economic development.

ii. Fiscal Policy Instrument:

Public expenditure is considered as an important tool of fiscal policy. It creates and increases the scope of employment opportunities during depression. Thus, public expenditure can prevent periodic cyclical fluctuations. During depression, it is recommended that there should be more and more governmental expenditures on the ground that it creates

jobs and incomes. On the contrary, a cut-back in government's expenditure is necessary when the economy faces the problem of inflation.

iii. Redistribution of Income:

Public expenditure is used as a powerful fiscal instrument to bring about an equitable distribution of income and wealth. By providing subsidies, free education and health care facilities to the poor people, government can improve the economic position of these people.

iv. Balanced Regional Growth:

Public expenditure can correct regional disparities. By diverting resources in backward regions, government can bring about all-round development there so as to compete with the advanced regions of the country.

Thus, public expenditure has both economic and social objectives.

1. Low income support: Public expenditure on free education, unemployment benefit and free medical facilities etc., increase the purchasing power of the people and especially of low income groups and it helps to protect and promote the efficiency of the people and the ability to work and save. Public expenditure for increasing the salaries and wages of the people and supply of goods and services at cheaper rate will increase their purchasing power, standard of living, efficiency and their ability to work and save may increase.
2. Social insurance programs: it has been argued that the social security measures like old age pension, provident fund benefit, insurance against sickness and employment at state expense reduce the desire of a person to work, save and invest. But practically, it does not adversely affect the desire to work, save and invest. These measures are socially desirable. Social security measures should be provided to the extent they do not discourage savings and investment. Therefore, public expenditure should be incurred in such a way so as to provide social security measures to the maximum extent which the government can afford without directly affecting saving and investment expenditure.

9.9 SUMMARY

1. Public expenditure can be defined as, "The expenditure incurred by public authorities like central, state and local governments to satisfy the collective social wants of the people is known as public expenditure."
2. Classification of Public expenditure refers to the systematic arrangement of different items on which the government incurs expenditure. Different economists have looked at public expenditure from different point of view.
3. The expression canon of public expenditure is used for the fundamental rules or principles governing the spending policy of the government.

4. Modern economies have all experienced tremendous growth in public expenditure. So it is absolutely necessary for governments to formulate rational public expenditure policies in order to achieve the desired effects on income, distribution, employment and growth.
9. Wagner's law states that "as the economy develops over time, the activities and functions of the government increase".
6. Wagner's law and Peacock-Wiseman hypothesis emphasize on the fact that public expenditure has tendency to increase overtime.
7. There has been a persistent and continuous increase in public expenditure in countries all over the world. The classical ideology of keeping the government spending at the lowest possible level has lost its appeal in the modern days. According to Adolf Wagner a German economist, there is a continuous tendency of the intensive and extensive and increase in the functions of the government.
8. The significance of the public expenditure arises from the fact that those services are provided by the government which might not otherwise be provided in significant amount by private expenditure. In the 1930s, J. M. Keynes emphasized the importance of public expenditure. The modern state is described as the '**welfare state**'. As a result, the Modern governments are undertaking various social and economic activities.

9.10 QUESTIONS

1. Discuss the meaning and classification of public expenditure.
2. Explain the canons of public expenditure.
3. Explain the various effects of public expenditure.
4. Explain Wagner's Law of increasing state activity.
9. Discuss Peacock Wiseman hypothesis of increasing public expenditure.
6. What are the causes of growing public expenditure?
7. Explain the significance of public expenditure in a welfare state.



PUBLIC DEBT

Unit Structure

- 10.0 Objectives
- 10.1 Introduction
- 10.2 Public Debt : Meaning
 - 10.3 Classification / Types of Public Debt
 - 10.4 The Burden of Public Debt
 - 10.5 Public Debt and Fiscal Solvency
- 10.6 Summary
- 10.7 Questions

10.0 OBJECTIVES

- To study the meaning
- To understand the classification / types of public debt
- To study the concept of burden of public debt
- To study different solutions to manage public debt
- To understand the concept of public debt and fiscal insolvency

10.1 INTRODUCTION

Public debt or public borrowing plays an important role in an economy when a country's expenditure is more than its collection of revenue. In such a situation government has to borrow to meet its spending requirement. In this chapter, we will study the meaning of public borrowing, classification of public debt, effects of public debt in an economy, and the ways to manage public debt by the government.

10.2 PUBLIC DEBT : MEANING

Public debt or public borrowing is considered to be an important source of income to the government. If revenue collected through taxes & other sources is not adequate to cover government expenditure government may resort to borrowing. Such borrowings become necessary more in times of financial crises & emergencies like war, droughts, etc.

Public debt may be raised internally or externally. Internal debt refers to public debt floated within the country; while external debt refers loans floated outside the country.

The instrument of public debt take the form of government bonds or securities of various kinds. Such securities are drawn as a contract between the government & the lenders. By issuing securities the government raises a public loan & incurs a liability to repay both the principal & interest amount as per contract. In India, government issues treasury bills, post office savings certificates, National Saving Certificates as instrument of Public borrowings.

10.3 CLASSIFICATION / TYPES OF PUBLIC DEBT

Government loans are of different kinds, they may differ in respect of time of repayment, the purpose, conditions of repayment, method of covering liability. Thus the debt may be classified into following types.

1. Productive and Unproductive debts

A. Productive debt :-

Public debt is said to be productive when it is raised for productive purposes and is used to add to the productive capacity of the economy. As Dalton puts, productive debts are those which are fully covered by assets of equal or greater value.

If the borrowed money is invested in the construction of railways, irrigation projects, power generations, etc. It adds to the productive capacity of the economy and also provides a continuous flow of income to the government. The interest and principal amount is generally paid out of income earned by the government from these projects.

Productive loans are self liquidating. Generally, such loans should be repaid within the lifetime of property. Thus, such loans does not cause any net burden on the community.

Unproductive debt :-

Unproductive debts are those which do not add to the productive capacity of the economy. Unproductive debts are not necessarily self liquidating. The interest and the principal amount may have to be paid from other sources of revenue, generally from taxation, and therefore, such debts are a burden on the community. Public debt used for war, famine relief, social services, etc. is considered as unproductive debt.

However, such expenditures are not always bad because they may lead to well being of the community. But such loans are a net burden on the community since they are repaid generally through additional taxes.

2. *Voluntary and Compulsory Debt*

A. **Voluntary debt :-**

These loans are provided by the members of the public on voluntary basis. Most of the loans obtained by the government are voluntary in nature. The voluntary debt may be obtained in the form of market loans, bonds, etc. The Government makes an announcement in the media to obtain such loans. The rate of interest is normally higher than that of compulsory debt, in order to induce the people to provide loans to the government.

B. **Compulsory debt :-**

A compulsory debt is a rare phenomenon in modern public finance unless there are some special circumstances like war or crisis. The rate of interest on such loans may be low. Considering the compulsion aspect; these loans are similar to tax, the only difference is that loans are rapid but tax is not. In India, compulsory deposit scheme is an example of compulsory debt.

3. *Internal and External Debt*

A. **Internal debt :-**

The government borrows funds from internal and external sources. Internal debt refers to the funds borrowed by the government from various sources within the country. Over the years, the internal debt of the Central Government of India has increased from Rs.1.54 lakh crore in 1990-91 to Rs.13.4 lakh crore in 2005-010.

The various internal sources from which the government borrows include individuals, banks, business firms, and others. The various instruments of internal debt include market loans, bonds, treasury bills, ways and means advances, etc.

Internal debt is repayable only in domestic currency. It imply a redistribution of income and wealth within the country & therefore it has no direct money burden.

B. **External debt :-**

External loans are raised from foreign countries or international institutions. These loans are repayable in foreign currencies. External loans help to take up various developmental programmes in developing and underdeveloped countries. These loans are usually voluntary.

An external loan involves, initially a transfer of resources from foreign countries to the domestic country but when interest and principal amount are being repaid a transfer of resources takes place in the reverse direction.

4. *Short-Term, Medium-Term & Long-Term Debts*

A. Short-Term debt :-

Short term debt matures within a duration of 3 to 9 months. Generally, rate of interest is low. For instance, in India, Treasury Bills of 91 days and 182 days are examples of short term debts incurred to cover temporary shortages of funds. The treasury bills of government of India, which usually have a maturity period of 90 days, are the best examples of short term loans. Interest rates are generally low on such loans.

B. Medium-Term debt :-

The Government may borrow funds for medium term needs. These funds can be used for development and non development activities. The period of medium term debt is normally for a period above one year and up to 5 years. One of the main forms of medium term debt is by way of market loans.

C. Long-Term debt :-

Long term debt has a maturity period of ten years or more. Generally the rate of interest is high. Such loans are raised for developmental programmes and to meet other long term needs of public authorities.

5. *Redeemable and Irredeemable Debts*

A. Redeemable debt :-

The debt which the government promises to pay off at some future date are called redeemable debts. Most of the debt is redeemable in nature. There is certain maturity period of the debt. The government has to make arrangement to repay the principal & the interest on the due date.

B. Irredeemable debt :-

Such debt has no maturity period. In this case, the government may pay the interest regularly, but the repayment date of the principal amount is not fixed. Irredeemable debt is also called as perpetual debt. Normally, the government does not resort to such borrowings.

6. *Funded and Unfunded Debts*

A. Funded debt :-

Funded debt is repayable after a long period of time. The period may be 30 years or more. Funded debt has an obligation to pay fixed sum of interest subject to an option to the government to repay the principal. The government may repay it even before the maturity if market conditions are favourable. Funded debt is Undertaken for meeting more permanent needs, say building up economic & industrial infrastructure. The government usually establishes a separate fund to repay this debt. Money is credited by the government into this fund & debt is repaid on maturity out of this fund.

B. Unfunded debt :-

Unfunded debts are incurred to meet temporary needs of the governments. In such debts duration is comparatively short say a year. The rate of interest on unfunded debt is very low. Unfunded debt has an obligation to pay at due date with interest.

10.4 THE BURDEN OF PUBLIC DEBT

Over the years, the public debt of the India's Central and that of State government has increased considerably during the planning period. The Government borrows funds by way of public debt to meet the various development and non-development expenses.

Table below indicates composition of public debt of the Central Govt. of India.

Public Debt (Central Govt. of India) Rs. Crore

Debt	1990-01	2005-06
<i>Internal</i>	1,54,004	13,35,954
<i>External</i>	31,525	68,392
Total	1,85,529	14,04,346

Economic survey 2006-07

Apart from internal debt, there are also internal liabilities of the central government in the form of small savings of the public, provident funds, reserve funds & deposits of Government department. Both internal and external debt carry a burden on the economy of nation.

6.1.1 The Burden of Internal Public Debt

1. Internal debt trap

One of the bad effects of internal debt is the interest paid by the government. Such interest payments increase public expenditure and may become a cause for fiscal deficit. If internal public debt is not checked and kept within limits, it may take the country to the worst position called 'Internal Debt Trap'.

2. More burden on poor and weaker sections

Internal debt provides opportunities for the rich and higher middle class to earn a higher rate of interest from the state on their lending. At the same time the poor suffer a lot due to the tax burden. The government levies taxes to repay interest on public debt. But the tax burden does not necessarily fall on the rich unless it is progressive in nature. In the case of indirect taxes, the burden is felt more by the poor than the rich.

3. *Increasing interest burden*

Public borrowing may become costlier for the government especially when it resorts to public borrowing by issuing bonds and debentures. Such bonds and debentures carry a high rate of interest to the extent of 15 percent. The impact of such interest payments may develop manifold and still worsen in the future if the government stick to the same policy of borrowing in the years to come.

4. *Unjustified transfer*

The servicing of internal debt involves transfers of income from the younger to the older generations and from the active to the inactive enterprises. The government imposes taxes on enterprises and earnings from productive efforts for the benefit of the idle, inactive, old and leisurely class of bond holders. Hence work and productive risk taking efforts are penalised for the benefit of accumulated wealth. This adds to the net real burden of debts.

5. *Indirect real burden*

Internal debt involves an additional indirect real burden on the community. This is because the taxation required for servicing the debts reduces the tax payer's ability to work and save and affects production adversely. The government may also economise social expenditure thereby, reducing the economic welfare of the people.

Taxation will reduce the personal efficiency and desire to work. Thus there would be a net loss in the ability and desire to work. The creditor class will also not have any incentive to workhard due to the prospect of receiving interest on bonds. This would further cause a loss to production and increase the indirect burdenof debt.

6.1.2 *The Burden of External Public Debt*

External debt is beneficial in the initial stages as it increases the resources available to the country. But its repayment & servicing creates a burden on the debtor country.

1. *External debt trap*

The external debt creates direct money burden. This is because; it involves transfer of funds from the debtor country to foreign citizens. The degree of burden depends upon the interest rate, and the loan amount. The loans are normally to be paid in foreign currency. Therefore, the funds are mostly transferred from export earnings or by raising more funds from foreign markets. Borrowing by way of additional loans would put extra burden on the country. The situation may become so worse, that the country may be caught in the external debt trap. It may have to borrow from foreign markets to repay the interest amount and it would be very difficult to repay the principal amount.

2. *Direct real burden*

The external debt may also result in direct real, burden. The citizens of the debtor will have to suffer loss of economic welfare to the extent of repayment of principle amount and interest burden.

The foreign currency earned through exports would have been utilized to import better goods and technology. Which would have increased the economic welfare of the citizens of the debtor country. But because of external debt repayment, they have to restrict their welfare which the imported goods would have provided. In other words, the citizens of debtor country are deprived of imported goods and service to the extent till the loans and interest amount is repaid.

3. *Decline in expenditure to public welfare programmes*

When the government spends a significant portion of its resources towards the payment of foreign debt it reduces the government expenditure to that extent which otherwise would have been spent for public welfare programmes.

4. *Decline in the value of nation's currency*

The repayment of external debt involves an increase in the demand for the currency of the creditor country. This will raise the exchange rate of the creditor country's currency, and aggravate the problem of foreign exchange crisis.

The creditor country may also be adversely affected if it is induced to import more from the debtor country. This may hinder the growth of their domestic industries and cause unemployment.

5. *Burden of unproductive foreign debt*

The magnitude of external debt burden depends upon whether the debt is incurred for productive purposes or for unproductive purposes. If it is incurred for unproductive purposes, it will create a greater burden and sacrifice on the citizens of the debtor country.

6. *Political exploitation*

In recent years, it was found that the lending countries who dominate international organisations like World Bank & international monetary fund use the lending opportunity as an instrument to exploit the borrowing countries economically & politically.

6.1.3 *Shifting the Burden of Public Debt*

When resources for government expenditure are generated through taxation, the present generation bears the burden but when resources are generated through public debt, the future generation pays the interest & principal and thus bears the burden. Thus in the case of public debt the

burden falls on the prosperity. Payment of such projects out of taxation would be unjustified as it would put burden on the present generation while benefit would accrue to the future generations. In future when the time for payment of interest & principal comes, the government will have to tax people to pay money to bond holders. The future tax payers will pay future bond holders. It would merely imply diversion of funds from one set of people to another within the country. However, it will involve direct real burden as the classes of tax payers & bond holders are likely to be different. The burden of taxation is likely to be heavy on general mass while the benefit will accrue to small rich class of bond holders.

Whether the burden of public debt is borne by future generations or not may also depend upon many factors. The loan raised for productive purposes may not create burden on future generation since it will create assets and will add to productive capacity of the economy. This would not only increase income for present generation but also for the posterity. If it is used for unproductive purposes or emergencies like war it will shift burden on future generation.

Whether the burden will shift or not also depends on whether the present generation pays off debts by sacrificing current consumption or investment. If it is done by reducing current consumption, future generation will not bear the burden. But if it is done by reducing investment the future generation will bear the burden.

If loans are short term it can be repaid by the current generation. This will not shift the burden. In case of long term loans shifting of burden will depend upon whether the loan is self liquidating or deadweight. It may be concluded from the above analysis that shifting of the burden of public debt from present to future generations may be possible, but it depends of various factors.

10.5 PUBLIC DEBT AND FISCAL SOLVENCY

Public debt is the total amount, including total liabilities, borrowed by the government to meet its development budget. The term is also used to refer to overall liabilities of central and state governments. Fiscal solvency is the ability of the government to meet its long-term debts and financial obligations. It is an important measure of financial health of the country. It demonstrates government's ability to manage its operations into the foreseeable future. In simple words fiscal solvency refers to the management of public debt. The objective of the management of public debt is to adopt such methods of borrowing funds and the repayment of loans by the government which helps to maintain economic stability i.e., it should reduce inflationary and deflationary effects upon the economy.

10.5.1 Definition and significance:

The public debt management is concerned with the decisions regarding the forms of public debt issued, terms on which new bonds are sold, maturing

debts are redeemed or refunded, the proportion in which the different forms of public debt should be issued, the pattern of maturities of the debt and its ownership etc. in short the management of public debt is concerned with refunding, floating or retirements of public debts etc.

The management of the public debt is very significant because there can be important economic effects of the changes in the size of the public debt on the operation of the economy. The public debt policy, fiscal policy and the monetary policy are closely connected with each other for the determination of economic policy.

10.5.2 Principles of public debt management

1. The interest cost of servicing public debt must be minimized: The interest cost of servicing public debt should be kept minimum because the government has to impose additional taxes or the rates of existing taxes are raised for the payment of interest cost. The interest can be minimized, if the central bank of the country is induced to keep the interest rate low by means of effective monetary policy.
2. Satisfaction of the needs of investors: Public debt should be managed in such a way that the needs of the investors with regard to the types of the government securities and the terms of issues are satisfied. If the public debt management fails to satisfy the needs of the investors, there may be disturbances in the security markets on account of sale of securities.
3. Funding of short term debt into Long term debt: Public debt management should help to fund as much of the short term debt into long term debt as possible. The funding operations must be undertaken in such a way that there is no undue rise in the long term interest rates.
4. Public debt policy must be coordinated with fiscal and monetary policy: the coordination is essential to maintain economic stability and to promote economic growth.

10.5.3 Redemption of public debt:

Redemption means repayment of a loan. All government loans should be repaid promptly. Advantages of debt redemption are as follows:

1. It saves the government from bankruptcy.
2. It discourages unnecessary expenditure of the government.
3. It maintains confidence of the investors.
4. It would be easy for the government to raise new loans in future.
5. It reduces cost of debt management.
6. When the loans are repaid, the resources may be diverted to their other potential uses.

10.5.4 Methods of repayment:

Following are the various methods of debt repayment.

1. **Repudiation:** means refusal to pay the debt by the government. It shakes the confidence of the people and banks in the government. The government finds it difficult to raise new loans in the near future. In case external debt, it may create a number of difficulties for the repudiating country such as economic blockade, military invasion etc. by the foreign countries.
2. **Refunding:** When the government sells its bonds to pay its floating obligations, the debt is said to be refunded. It is process by which maturing bonds are replaced by the new bonds. The refunding is undertaken mainly with a view to meeting maturity requirements.
3. **Conversion:** conversion of public debt means exchange of new debts for the old ones. In this method, the debt is actually not repaid but the form of debt is changed. The process of conversion consists generally in converting or altering a public debt from a higher to a lower rate of interest.
4. **Actual repayment:** For actual repayment of loans the following measures can be adopted:
 - a) **Sinking fund:** it is a device which has been developed for the regular retirement of debt. It is a fund into which a certain amount of revenue is deposited each year for the repayment of out-standing debt. The fund is used for the purchase of outstanding debt and the ultimate retirement of loans as they fall due.
 - b) **Surplus revenues:** a policy of surplus budget may be followed annually for clearing of public debt gradually instead of creating a fund for its repayment on maturity.
 - c) **Terminal annuities:** The government may issue terminal annuities, a part of which matures every year according to a serial order announced or decided by lottery system, so that the debt can be cleared every year and consequently the burden of interest is also reduced to that extent every year. Thus it is method of repayment of loan in instalments.
 - d) **Capital levy:** refers to a very heavy tax on property and wealth. It is a once for all tax imposed on the capital assets above the certain value.

10.5.5 Repayment of external debt:

The redemption of external debt is possible only through the earning of foreign exchanges to pay it. It can be done by creating export surpluses. If foreign loans are invested in those industries, which increase the supply of those commodities which are exported, the loans may be easily repaid. If,

however loans are utilized for unproductive purpose, and export surplus may be possible at the cost of home consumption, and hence the burden of debt may be very much felt by the people.

10.6 SUMMARY

1. Public debt or public borrowing is considered to be an important source of income to the government. If revenue collected through taxes & other sources is not adequate to cover government expenditure government may resort to borrowing. Such borrowings become necessary more in times of financial crises & emergencies like war, droughts, etc.
2. Public debt may be raised internally or externally. Internal debt refers to public debt floated within the country; while external debt refers loans floated outside the country.
3. Government loans are of different kinds, they may differ in respect of time of repayment, the purpose, conditions of repayment, method of covering liability. Thus the debt may be classified into following types.
 - Productive and Unproductive debts
 - Voluntary and Compulsory debts
 - Internal and external debts
 - Short term, Medium term and Long term debts
 - Redeemable and Irredeemable debts
 - Funded and Unfunded debts
4. Over the years, the public debt of the India's Central and that of State government has increased considerably during the planning period. The Government borrows funds by way of public debt to meet the various development and non-development expenses.
5. Both internal and external debt carry a burden on the economy of nation.
10. The burden of public debt adversely affect the growth and development of the economy. Therefore there is a need to effectively manage public debt. Management of public debt involves; repayment of public debt, controlling the amount of borrowings and productive use of borrowed funds for development.
7. Public debt is the total amount, including total liabilities, borrowed by the government to meet its development budget. Fiscal solvency is the ability of the government to meet its long-term debts and financial obligations. It is an important measure of financial health of the

country. In simple words fiscal solvency refers to the management of public debt. The objective of the management of public debt is to adopt such methods of borrowing funds and the repayment of loans by the government which helps to maintain economic stability i.e., it should reduce inflationary and deflationary effects upon the economy.

10.7 QUESTIONS

1. Discuss the meaning of public borrowing.
2. Explain various types of Public debt.
3. Differentiate between Internal debt and External debt.
4. Discuss the burden of internal debt and external debt.
5. Explain the concept of shifting of debt burden.
10. Explain the management of public debt in India.



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FISCAL POLICY

Unit structure

- 11.0 Objectives
- 11.1 Meaning of fiscal policy
- 11.2 Functioning of fiscal policy
- 11.3 Objectives of fiscal Policy
- 11.4 Constituents
- 11.5 Limitations
- 11.6 Classical and Neo Classical View of Fiscal Policy
- 11.7 Principles of Sound Finance
- 11.8 Principles of Functional Finance
- 11.9 Types of Fiscal Policy
- 11.10 Summary
- 11.11 Questions

11.0 OBJECTIVES

- To know the meaning of fiscal policy
- To understand how does the fiscal policy works
- To know the objectives of fiscal policy
- To understands the different constituents of fiscal policy
- To know the limitations of the policy
- To understand the classical principle of sound finance
- To understand neo classical principle of functional finance
- To know the different types of fiscal policy
- To know limitations of fiscal policy

11.1 MEANING OF FISCAL POLICY

Fiscal policy is the part of government policy that deals with raising revenue through tax and non-tax sources and deciding on the level and pattern of public expenditure.

Fiscal policy is composed of several parts. These include, **tax policy, public expenditure policy, investment or disinvestment strategies and debt or surplus management.** Fiscal policy is an important constitution of the overall economic framework of a country and is therefore intimately linked with its general economic policy strategy. In most modern economics, **governments** deal with **fiscal policy** while the **central bank** is responsible for **monetary policy**.

These measures included **social security expenditures** and **following counter cyclical budgetary policy to keep aggregate demand high.**

In **developing countries**, besides traditional functions, governments also promote **economic development.** In developing economies, fiscal policy is used as an important instrument to bring about **creation of economic and social infrastructure, employment generation, poverty reduction and improvement in income distribution.**

11.2 FUNCTIONING OF FISCAL POLICY

According to Keynesian economists, the primary objective of fiscal policy is to maintain high level of **aggregate demand through** variables like **disposable income, public and private investment, consumption expenditure, net exports and government purchases.** A high level of aggregate demand will result in higher production, employment and ensure better standard of living. A change in any one of the policy variables affects all other variables as they are all **interrelated.**

This interrelationship can be explained as follows :

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

Where, AD = aggregate demand

C = consumption expenditure

I = investment expenditure

X = exports

M = imports

In the short run,

$$C = f(Y_d) \text{ and } M = f(Y)$$

$$Y_d = Y - tY + TR$$

Where, Y = gross income

Y_d = disposable income (income left with people for spending)

TR = transfer payments (e.g. pension, subsidies, unemployment benefits)

t = tax rate (direct tax is imposed as a proportion of income Y)

By using fiscal policy measures, the government can influence **aggregate demand (AD)** as follows :

- (a) C can be increased by reducing t and increasing TR as this will raise the level of disposable income.
- (b) Imposition of **import duties** will reduce M and **subsidies** and **tax incentives** to **exports** will increase X .
- (c) I can be raised through tax exemptions as well as subsidies to producers.
- (d) G can be increased through government purchases.

All these decisions will increase **aggregate demand and national output**. **But these decisions will have implications on government's budget**. Deficits and surplus budgets have their own impact on the economy in the long run. For example, if the government increases G and reduces t in order to increase AD and achieve higher GDP growth in the short run, it will run the risk of incurring heavy fiscal deficit. This will cause inflation as money supply will rise and it will make it necessary for the government to borrow heavily, increasing interest burden. Resources may have to be diverted from other public expenditure heads for interest payments. All these factors will slow down economic growth in the long run. Therefore, fiscal policy decisions have to be made with utmost care by the government.

11.3 OBJECTIVES OF FISCAL POLICY

The fiscal policy is formulated with **specific objectives** in view. The objective in **developed countries** is to achieve **economic stability** and **maintain high aggregate demand**.

In **developing countries** the goal is to achieve **economic growth and development**.

Following are some of the objectives of fiscal policy

1. **Optimum Allocation of Resources** : The most important function of fiscal policy is to determine how the country's **resources will be allocated**. What should be the share of different sectors of the economy in terms of resource allocation? This is closely related to the government's taxation and expenditure policies. **Allocation of resources depends upon the collection of taxes and size and**

composition of government expenditure. The national budget determines how funds are allocated to different heads of expenses. The policy of public expenditure is used by the government to directly undertake resource allocation for different sectors. On the other hand, the government can use taxation and subsidies to indirectly influence resource allocation. For example, tax incentives given to SEZ units will encourage investors to direct resources to those units.

2. **Full Employment** : The importance of fiscal policy as an economic tool gained significance during the Great Depression in 1930s when the developed countries were suffering from unemployment. Thus the main objective of fiscal policy was defined as achievement of **full employment**. For this the fiscal policy should be designed to keep the level of aggregate demand high. In **developing economies** government expenditure on social and economic infrastructure is used to **generate employment** opportunities.
3. **Economic Stability** : Stabilization of the economy is another important function of fiscal policy, especially in developed economies that experience business cycles. The cycle nature of the market in these economies causes fluctuations in variables like income, output, investment and employment causing hardships to the people. When growth periods end, they are followed by contraction in the form of recession. Fiscal policy is meant to counter these fluctuations. This known as **counter cyclical fiscal policy**. A counter cyclical fiscal policy is adopted to counter the effects of **recession and depression** by following a **deficit budget**. This brings about an increase in government expenditure to generate employment and decrease in taxes to induce consumption and investment. On the other hand, during **inflation**, government expenditure and tax rates are lowered to reduce aggregate demand and prices. A **surplus budget** is followed.
4. **Increasing the Rate of Investment and Capital Formation**: In developing countries the problem of **mass and structural unemployment**. Fiscal policy in such countries is aimed at increasing the rate of capital formation through investment. This can be done by giving tax incentives and subsidies to encourage private sector investment. Also, in many developing countries the government directly takes part in capital formation through investment in social and economic infrastructure.
5. **Encouraging Socially Optimum Pattern of Investment**: In developing countries fiscal policy can direct investment in those fields that are most desirable from social point of view. For example, fiscal incentive to small scale industries and infrastructure development.
6. **Reducing Income Inequalities** : Fiscal policy can be effectively used to manipulate the **distribution of national income** and **resources**. Taxation and public expenditure policies are used by the government to reduce inequalities. **Progressive direct taxes** impose heavier

burden on the rich than the poor. Public expenditure on **social infrastructure and subsidies** on food, housing, health and education help reduce income inequality.

7. **Reducing Unemployment and Underemployment** : Public expenditure can play an important role in this regard. Public works programmes can be initiated to create employment and to absorb surplus labour from areas of underemployment especially in developing countries.
8. **Controlling Inflation** : Developing countries need to resort to **deficit financing** in order to finance their programmes of industrialization and infrastructure building. This creates **inflationary conditions** in the economy as purchasing power is bound to rise with deficit financing. In order to control inflation, the ideal fiscal response would be **reduction of public expenditure**. But this is unlikely to take place in a developing country and hence the fiscal response should be in the form of encouraging supply of goods and services through appropriate incentives. As supply increases, the inflationary pressure is likely to be on the decline.

11.4 CONSTITUENTS OF FISCAL POLICY

There are four constituents of fiscal policy

1. **The Budget** : The budget is an estimate of the government's expenditure and revenue for a fiscal year. It is an important instrument of fiscal policy used by most modern governments to fulfill objectives of economic growth, reduction of inequalities, generation of employment and economic stability. The budget is used to allocate and divert resources to the desired sectors. A budget is typically comprised of the revenue and the capital budget. It can be balanced, surplus or deficit. According to functional finance, the budget can be used to reduce the effects of business cycle. During recession, a deficit budget should be followed and during inflation, a surplus budget should be followed.
2. **Taxation** : Taxes are the most important sources of revenue to a government. They are compulsory payments levied on income and wealth (direct taxes) and on production, sales and movement of commodities (indirect taxes).

Taxes are not only sources of revenue to the government, but they are used to reduce income inequality (redistributive taxation) and maintain price stability (anti-inflationary taxation). Taxes are levied at progressive, proportional and regressive rates. Progressive taxes, like income tax, are based on ability to pay and are used to reduce income inequality. Indirect taxes are regressive in nature. Taxes have wide ranging effects on production, consumption, investment and savings.

3. **Public Expenditure** : The public expenditure policy is the end objective of fiscal policy. Government spending is classified as revenue and capital spending. The primary objective of public expenditure is generation welfare. Public expenditures are financed through tax and non-tax sources of revenue as well as public borrowing.
4. **Public Debt** : Most governments finance their expenditure through borrowings when the tax and other sources of revenue prove to be inadequate. Public debts are classified on the basis of time period, productive or unproductive, voluntary or compulsory. One of the most important classifications of public debt is internal and external. Public debt cause burden of repayment which results in income redistribution.

All the above mentioned constituents of fiscal policy are discussed in details in different chapters in this book.

11.5 LIMITATIONS OF FISCAL POLICY

The effectiveness of fiscal policy is subject to the following limitations :

1. **Practical Difficulties** : Theoretically, the outcomes of fiscal policy are based on certain assumptions. However, real macroeconomic situations are far more complex. Certain assumptions made in theory may not be present in reality making fiscal policy ineffective. For example, during inflation, taxes are raised and public expenditure is lowered. This measure would only be effective in controlling inflation, if money supply in the economy is not increased by government's deficit financing. Also, fiscal policy must be complementary to monetary policy.
2. **Forecasting Difficulties** : Reliable forecasting of target variables is a very important factor in the success of fiscal measures. These variables include national income, output, price level, employment, consumption and investment. Forecasting is a function of data collection and analysis which is difficult in developing economies. Even in developed economies, forecasting has not been foolproof.
3. **Multiplier** : The efforts of fiscal measures are transmitted to the economy through the working of various multipliers like, investment multiplier, tax multiplier. For example, the effect of an induced government investment on infrastructure will lead to an increase in income and consumption through the multiplier process. The exact impact of such an investment would depend on the investment multiplier coefficient. Firstly, it is difficult to estimate the values of the multiplier coefficients due to leakages and uncertainties. Secondly, there are time lags in the working of the multipliers. It may happen that by the time the full impact of a fiscal decision is felt on the economy, economic conditions may have changed in such a way that it requires another contrary fiscal decision than the previous one. For

example, the government may decide to increase expenditure in order to boost economic growth. This can lead to rise in fiscal deficit. By the time economic growth is revived, the fiscal deficit may have grown so large as to force the government to cut down on capital and revenue expenditure, once again affecting growth.

4. **Time Lags** : These lags exist in case of discretionary fiscal policy which are deliberate measures taken by the government. It takes time for the government to recognize a problem and then decide to implement a suitable policy to address the problem. These are inside lags. The outside lag is in the form of time taken for the impact of the policy to be felt. These lags reduce the effectiveness of fiscal policy.
5. **Underdeveloped Economies** : Fiscal measures, as well as monetary policy measures, are not very effective in underdeveloped economies due to factors like, low taxable capacity, large unorganized and non-monetised financial system, low income levels and corruption.
6. **Political Influence** : While monetary policy is under the central bank's control, fiscal policy is implemented by the government. The central bank is an autonomous institution, relatively free from political influence. This is not true of the fiscal policy. The democratic governments often mix politics with economics in their budget decisions. This limits the effectiveness of fiscal policy. For example, during election years, the government may increase subsidies and other expenditures to gain public support. This can increase fiscal deficit and cause harm to the economy in the long run. Thus, short run political gains can compromise long run economic goals of fiscal policy.

11.6 CLASSICAL AND NEO CLASSICAL VIEW OF FISCAL POLICY

Fiscal policy deals with government policy in relation to raising revenue through taxation and other means, and deciding on the level and pattern of public expenditure. It is composed of tax policy, public expenditure policy, investment or disinvestment strategies and budget management.

In recent history, fiscal policy has been a very important component of government policy. But until the Great Depression of 1929, the government's role was concentrated on traditional functions like provision of defence, law and order and civic amenities. It was believed that the government need not use fiscal policy to interfere in the market mechanism, since the market is efficient enough to correct itself, in case it failed at times. This was known as the principle of sound finance. Most classical and neo-classical economists advocate sound finance policy.

But after the Depression, it was realised that markets can fail and do not always correct themselves, causing tremendous hardship to the people. Unemployment and price instability make life difficult for the common

person. Therefore, most laissez faire capitalist economies transformed themselves into welfare states. In such economies, the role of the governments expanded to include several non- traditional activities, like reduction of inequality, provision of social justice, building economic infrastructure and most Governments began to use fiscal policy to avoid another depression, control inflation and keep aggregate demand high. Therefore, fiscal policy was used as a contra-cyclical measure. This type of use of fiscal policy to bring about desired changes in the economy is known as functional finance. The main advocate of this type of fiscal policy was John Maynard Keynes.

A major problem of fiscal policy is finding a balance between the short run stabilization objectives and long run goals of growth and development. At times, the short run policies adopted to deal with cyclical fluctuations like inflation and recession may conflict with long run goals of the economy.

Two conflicting views on how to achieve the goals of fiscal policy are represented by the following principles :

(a) The Principle of Sound Finance

(b) The Principle of Functional Finance

The discussion below involves the basic economic, political and sociological basis for arguments for and against sound finance and functional finance. In the analysis, the classical school includes the economic thoughts of economists like Adam Smith, David Ricardo, J.B. Say, John Stuart Mill and Thomas Malthus. The term 'modern' used in the context here refers to denote economists who challenged and opposed the classical principle of sound finance. They include John Maynard Keynes, A.C. Pigou, Edgeworth and most significantly, Abba P. Lerner.

11.7 PRINCIPLES OF SOUND FINANCE

Prior to 1930s, classical economists did not include fiscal policy in their analysis of an economy. It was believed that the less the government interfered in the economy the better it is. This belief, along with private ownership of factors of production, was the foundation of laissez faire capitalism, which is a system where economic transactions are largely between private owners of factors of production and such transactions are free from government restrictions, taxation and subsidies. Laissez faire policy advocates that there should be only enough government regulations to protect property rights of individuals. The market mechanism should be left free of any government interference.

Such an economic system formed the basis for classical, and later, neo-classical economic thoughts. In such a system, the role of the government was expected to be restricted to traditional areas like defence, law and order, justice, provision of civic amenities and therefore most government

spending was expected to be restricted to these areas. The classical economists argued that taxation should be restricted to a limit that was sufficient for the government to raise funds for performing its traditional functions. The role of the budget and fiscal policy did not extend beyond raising funds through taxation and spending on traditional functions. The primary belief was that the size of the government's budget should be small and the budget should balance. These beliefs form the basis of the principle of sound finance.

The following are some of the features of sound finance :

1. **Say's Law** : Like many other classical principles, the principle of sound finance is also based on Say's Law, that is, "Supply creates its own demand." Since one man's expenditure is another man's income, aggregate demand will always be equal to aggregate supply. This belief forms the base of the argument on which classical economists argued in favour of sound finance.
2. **Full employment** : the classical economists argued that since $AD = AS$, there cannot be over-production and under-consumption. In other words, the economy cannot suffer from fluctuations like unemployment and inflation. Driven by profit motive, the private sector will ensure optimum use of resources. Therefore, there will be full employment in the economy. Only voluntary and frictional unemployment may exist.
3. **Invisible hand** : Private owners of factors of production will always achieve maximum level of efficiency in their use of resources, as they are driven by self-interest and profit motive. The concept of Adam Smith's 'invisible hand' is used to explain how private self interest will result in collective social good.
4. **Taxation** : According to the classical school of thoughts, taxes are harmful because they adversely affect willingness and ability of work, save and invest. Taxation was expected to be kept at a minimal limit. High progressive taxation will lead to slow economic progress. They believed that taxes should not be used to redistribute income.
5. **Public expenditure** : Government spending was expected to be in the traditional areas like defence, law and order, justice and provision of civic amenities. Since government budget was not expected to be large in size, government spending was not large relative to total spending in the economy. Therefore, it was believed that government spending would not have any significant impact on the economy. The classical school generally viewed the government with suspicion and therefore any increase in public expenditure during peacetime was not advocated. Sound finance is based on the belief that government which spends least is the best.

6. **Balanced budget** : In laissez faire capitalism, since all factors of production are normally owned and used by private individuals, the government can make use of such factors only by depriving the private sector. Expenditure incurred by the government would not increase total demand for factors of production as there is already full employment. Therefore, there is no justification for the government to expand its expenditure beyond revenue and incur deficit budget. Budget should always balance except during wartime when government will have to expand expenditure to fight war. The state should not take up business activities as private sector is considered to be most efficient. Also, there is no justification for large public expenditure as it is assumed that there is full employment in the economy.
7. **Market efficiency** : The market mechanism is assumed to achieve maximum level of efficiency. Market failures are only temporary and the market is fully capable of correcting itself. Therefore there is no justification of any government regulation and restrictions on the market.
8. **Ricardian Equivalence Theorem** : Budget deficits are uneconomical, harmful and socially undesirable. They lead to inflation and harm economic progress. This belief was based on Ricardian Equivalence Theorem. According to this theorem, deficits will not boost the economy. Deficits will have to be later met by raising taxes. This is known to the people and they will increase their savings to pay higher taxes later. As their savings increase, they will not increase consumption and therefore, increased public expenditure will not be able to boost demand, production and boost growth.

11.8 PRINCIPLES OF FUNCTIONAL FINANCE

In the 1920s, Europe, and the 1930s, the United States, began to experience depression. During this time, economists, like A.C. Pigou, F. Knight, and J.M. Keynes, began to question sound finance principles. Low profit expectations during depression kept investment spending low, causing unemployment to rise. The economists favoured, at least temporarily, giving up the sound finance principles and using government spending to stimulate the economy.

Increased government spending during depression would mean running a deficit budget. But this was considered necessary as private investment was not forthcoming. Increased government expenditure in infrastructure building, job creation and paying social security would increase income. This would encourage spending and aggregate demand would rise and ultimately would help pull the economy out of the depression or recession. It was generally agreed by economists and policy makers that fiscal policy could be of some use in helping pull an economy out of a severe recession. J.M. Keynes was one of the economists who advocated such a fiscal

policy. This view that fiscal policy can be used to offset undesirable cyclical fluctuations in output was later termed as '**functional finance**' by Abba P. Lerner.

The concept of functional finance has the following features :

1. **Market failure** : Unlike classical economists, modern economists believe that markets are not perfect and they can fail. They do not always correct themselves. Market failures can have severe economic consequences in the form of depression and hyper-inflation. The Great depression of 1930s brought the powerful US economy down. In more recent times, the financial crisis of 2007-08 in the USA showed that due to excessive de-regulation, financial markets can fail and become the cause of a severe and long standing recession. Also, due to globalization, this recession had affected the economic prospects of almost every country in the world.
2. **Importance of fiscal policy**: According to Abba P. Lerner, who advocated the concept functional finance, fiscal policy is the most important part of any economic policy. Taxation, public expenditure and public debt must be adopted according to the needs of the time. While classical economists believed that the main aim of public finance is to raise revenue, modern economists believe that the main objective of public finance is to correct imbalances in the economy. They are the most important instruments of promoting economic stability and progress. Budget must act as an instrument of economic change.
3. **Aggregate demand** : While classical economists believed that supply creates its own demand, modern economists, particularly Keynesians, believed that it is demand that leads to investment. Consumption and investment can rise or fall together. Aggregate demand consists of consumption demand, investment demand, government expenditure and net foreign income. Modern economists believed that it is aggregate demand that determine level of national income and employment. Deficiency in aggregate demand results in unemployment. Government expenditure needs to be increased during such times to boost aggregate demand to stimulate the economy.
4. **Budget** : Modern economists believe that the government, through public expenditure, taxation, or deficit financing, can maintain full employment. During recession and depression, public expenditure should be increased and the budget should be expanded to increase aggregate demand. A deficit budget is perfectly justifiable to pull the economy out of recession. On the other hand, during inflation, the government may have a surplus budget by raising taxes to control consumption. Modern economists have rejected the principle of a balanced budget at all times.

5. **Income redistribution** : According to modern economists, the distribution of national income is as important as its size. A more even distribution of income would increase the average propensity to consume (APC) and increase the level of investment and employment. A government aiming at full employment should try to redistribute national income in such a way that the savings never exceed current investment. Re-distribution taxation has been suggested as the best means for achieving this. This implies imposing high taxes on the rich and redistributing them to the poor through pension, welfare schemes and allowances. This will improve APC and increase schemes and allowances. This will improve APC and increase aggregate demand, boosting investment, employment, production and profits. Thus fiscal policy can provide social justice through better income distribution as well as benefit economic growth through higher investment.
6. **Welfare capitalism** : Karl Marx had predicted that, due to the inherent crisis, the capitalist system will collapse and make way for a new, more equal system. The Great Depression was a situation very close to what Marx had predicted. But it was Keynes who advocated fiscal measures for regulating capitalism and preventing its collapse. Keynes gave importance to compensatory actions through fiscal measures for improving and maintaining the level of effective demand and thus the level of economic activity in the country. The concept of functional finance forms the basis of welfare capitalism that now exists in most of the advanced economies.
7. **Social objectives** : Advocates of functional finance believe that public finance has no function in the interest of the entire society. Taxation, expenditure, borrowing policy and ownership and operation of public utilities must be measured on the basis of their effects on the entire society. Objective of taxation should be to redistribute income in the most socially just manner. Expenditure on social security, poverty eradication, medical care and education will always be justified as they bring in distributive justice. Public expenditure and taxation should follow the objective of equalizing marginal social cost and marginal social benefit. Social objectives are the primary focus of functional finance.

Though the concept of functional finance has been severely criticized by conservative economists and politicians, it has had very wide acceptability in the last few decades in most of the major developed as well as developing countries. After following functional finance policy for decades, in 1980s, many advanced countries began to adopt different versions of laissez faire capitalism by promoting privatization and reducing public expenditure on welfare measures. This coincided with globalization of trade and capital movement. There was high degree of market deregulation. This resulted in unprecedented increase in world trade and capital movement. This also led to high growth in emerging economies like India and China. But in advanced economies, market

deregulation resulted in multiple market failures. The USA experienced a major financial crisis followed by a long recession with high level of unemployment. The recession in the advanced economies effected the world economy, including the rapidly growing emerging countries. It became necessary for the advanced economies to expand their budgets and increase public expenditure to provide stimulus to their economies, thus reviving the policy of functional finance. Similarly, the emerging economies too had to expand their budgets to revive growth.

11.9 TYPES OF FISCAL POLICY

Based on their experiences of following sound and functional finance policies, countries have evolved fiscal policies to suit their own requirements. Most modern economies follow some version of functional finance in deciding on their fiscal policy. In most developed economies the primary objective of fiscal policy is to counter the harmful effects of economic fluctuations.

Following are some of the types of fiscal policies used :

1. Automatic Stabilisers :

Many developed economies have built-in flexibility in their tax and public expenditure structure that lead to automatic stabilization of the economy during inflation and recession. Due to built-in flexibility automatic adjustment takes place in government expenditure and tax revenue in response to changes in the national income.

When the national income rises and the economy experiences prosperity and inflation takes place. During such times, tax revenue automatically increases and government expenditure on social security like unemployment benefits reduces as less people are unemployed. This keeps effective demand under control and slows down the growth of aggregate demand preventing inflation.

On the other hand, during recession, public expenditure on unemployment benefits and other social security measures automatically go up while tax revenue falls. Due to this the growth of aggregate demand increases. Production rises, unemployment falls and this prevents the economy from going into depression.

These changes in tax revenue and government expenditure take place automatically due to the built-in flexibility in the fiscal system. This leads to automatic stabilization of the economy.

Automatic stabilizers work only under certain conditions. They will be ineffective in case of cost push inflation or inflation caused due to deficit financing. If the economy is affected by external factors like worldwide recession, automatic stabilizers will not work. Also they are not applicable

to developing economies where built-in flexibility in the first system is very limited.

2. Discretionary Fiscal Policy

In this type of fiscal policy, the government makes deliberate changes in its taxation and expenditure policies in order to achieve some targets. Changes are made in tax rates and structures, size and composition of public expenditure and debt. changes in tax rates, addition or abolition of taxes, result in changing the disposable income of people and bring about the desired changes in aggregate demand.

Discretionary changes in government expenditure take the form of expansion or reduction in the size of expenditure, changing the composition and sources of financing, changes in transfer payments like pensions, unemployment benefits etc. surplus or deficit in the budget and methods of financing deficit. All these changes have an impact on aggregate demand through consumption and investment expenditure.

Discretionary fiscal policy is effective only when it is used for short run corrections in the economy. For long run structural changes there should be effective automatic stabilizers. Besides, time lags in recognizing a particular problem and implementing the discretionary policy measure reduce the impact of the policy.

3. Contra-cyclical Fiscal Policy or Compensatory Fiscal Policy :

The main objective of contra-cyclical fiscal policy is to achieve economic stability. The purpose is to counter the phases of business cycle and minimize their negative impact on the economy. Such a fiscal policy is discretionary in nature and consists of deliberate budgetary action taken to manipulate aggregate demand. The budget is the primary instrument of compensatory fiscal policy.

A. Fiscal policy during Recession and Depression : During recession and depression the level of aggregate spending is very low. People reduce their consumption spending and businesses reduce their investment spending. Many resources remain unutilized as production levels of goods and services decline. There is under consumption and unsold inventories are high. The government has to then formulate a fiscal policy that will bring the economy out of such a situation.

During depression, deficit budget is followed. The government increases its expenditure and reduced taxes to encourage spending. The government can increase spending in the economy either Indirectly or through direct spending. Taxes are lowered in order to increase people's disposable income and encourage them to spend. Government can also undertake massive expenditure on public works programme in order to generate employment and transfer money to the people. Indirect taxes are also lowered to give benefits to businesses and lower their cost of production in order to help them produce more

and employ people. A cut in corporate income tax is also done to encourage investment.

In public expenditure policy during recession and depression, the government can use the following;

- (i) **Pump-priming** : The term originated in the United States of America in 1932. Here the government tries to revive economic activities in those sectors that are stagnant and their revival is necessary to take the economy out of recession, for example the banking sector. Government spending in these sectors should stimulate private spending by increasing purchasing power of the people. The policy of pump-priming was used to revive the US economy during the recession that began in 2008. The Japanese government under Prime Minister Shinzo Abe has been using this policy to revive the economy from the two decades of recession.
- (ii) **Compensatory spending** : This kind of spending is adopted to compensate the decline in private investment during recession and depression. Such expenditures are in the form of government investment in infrastructure building and introducing new social security measures. Compensatory spending should be carried out only as long as private sector investment is low and should be withdrawn once private investment picks up to a desired level. The problem with using such policies is that the governments are not able to time the beginning of recession and therefore may begin compensatory spending after recession has become serious. Secondly, expenditure on public works and infrastructure cannot be withdrawn easily as they have long gestation period. The programmes often continue even after the economy has revived. Such expenditure requires the government to borrow and this increases the debt servicing burden of the economy.

In view of the limitations of compensatory financing, many economists argue that the government should spend on social security measures like unemployment benefits and old age pension to increase purchasing power and revive the economy through indirect measures. In conclusion, we can say that to revive the economy from recession and depression, the government should follow a deficit budget.

- B. **Fiscal Policy during Inflation** : Inflation causes the value to money to decline people can buy less with their income. During inflation, the poor suffer the most and hence every government is concerned about reducing the harmful effects of high rate of inflation. Fiscal policy during inflation would include policy related to government spending, taxation and public borrowings.
 - (i) **Government expenditure** : During inflation, aggregate demand is high, there is unregulated private spending and the goods and services available are not sufficient to meet the rising demand. The policy to be followed during such a situation is to reduce government spending in

order to reduce purchasing power and bring down the price level. However, there are certain limitations to this policy. The government cannot reduce its spending in the short run to tackle inflation. Many public spending are medium to long-term commitments and they cannot be withdrawn at short notice.

- (ii) **Taxation** : Due to the difficulties regarding expenditure reducing policy, the government usually resorts to raising tax rates and imposing new taxes to control inflation. The objective of anti-inflationary taxation is to reduce aggregate demand and also to control speculative expenditure, like those on housing, stock market and commodities markets. However, taxes also cannot be increased indiscriminately as that will lead to tax evasion and will affect willingness and ability to work, save and invest.
- (iii) **Public Borrowings** : Along with increased taxation, the government could follow a policy of increasing public borrowing. The government can borrow by issuing bonds (long term) and treasury bills (short term) on a large scale. During inflation, people and the banking system have excess cash. Therefore, government debt instruments, with attractive interest rates, become a good source of earning for those who have excess cash. The sale of these instruments will absorb the excess money from the system and help to reduce purchasing power. Massive public borrowing also raises interest rate and this discourages borrowing also raises interest rate and this discourages borrowing from banks and encourages savings. All these measures help to reduce the rising aggregate demand and lower the price level. However, while following such a policy the government has to keep in mind the fact that massive increase in public borrowing will increase its debt burden and will enlarge fiscal deficit.

Fiscal policy followed during inflation will result in a surplus budget.

It is generally observed that fiscal policy may not be a very effective in countering the effects of inflation but it is much more effective in countering the effects of recession and depression. It is clear, that in order to achieve economic stability and to counter the effects of business cycle, the government will not be able to maintain balanced budget but will have to resort to either deficit or surplus budget.

11.10 SUMMARY

1. Fiscal policy is the part of government policy that deals with raising revenue through tax and non-tax sources and deciding on the level and pattern of public expenditure. Fiscal policy is composed of several parts. These include, tax policy, public expenditure policy, investment or disinvestment strategies and debt or surplus management.
2. According to Keynesian economists, the primary objective of fiscal policy is to maintain high level of aggregate demand through variables

like disposable income, public and private investment, consumption expenditure, net exports and government purchases. A high level of aggregate demand will result in higher production, employment and ensure better standard of living. A change in any one of the policy variables affects all other variables as they are all interrelated.

3. The fiscal policy is formulated with specific objectives in view. The objective in developed countries is to achieve economic stability and maintain high aggregate demand. In developing countries the goal is to achieve economic growth and development.
4. A major problem of fiscal policy is finding a balance between the short run stabilization objectives and long run goals of growth and development. At times, the short run policies adopted to deal with cyclical fluctuations like inflation and recession may conflict with long run goals of the economy. Two conflicting views on how to achieve the goals of fiscal policy are represented by the following principles :
 - (a) The Principle of Sound Finance
 - (b) The Principle of Functional Finance

11.11 QUESTIONS

1. Define fiscal policy. Explain how fiscal policy functions
2. Discuss the objectives of fiscal policy.
3. Discuss the constituents of fiscal policy.
4. What are the limitations of fiscal policy?
5. Discuss the principles of sound finance.
6. Write down the features of functional finance.
7. Explain discretionary and contra cyclical fiscal policy.
8. Write a note on Automatic stabilisers.



PUBLIC BUDGET, DEFICIT AND FRBM ACT 2003

Unit structure :

- 12.0 Objectives
- 12.1 Meaning and objectives of budget
- 12.2 Important types of public budget
- 12.3 Structure of Union Budget
- 12.4 Types of Deficit
- 12.5 FRBM ACT 2003
- 12.6 Classification of government Into Unitary and Federal Governments.
- 12.7 Meaning of Fiscal Federalism
- 12.8 Meaning of Fiscal decentralization
- 12.9 Financial relation between center and state
- 12.10 Summary
- 12.11 Questions

12.0 OBJECTIVES

- To know the meaning of budget
- To understand the objectives of Budget
- To know different types of Budget
- To understands the structure of union budget
- To understand the concept of fiscal responsibility and budget management
- To know the limitations of the FRBM
- To know broad classification of government
- To understand the meaning of fiscal federalism
- To know the Meaning of Fiscal decentralization
- To understands the financial relation between center and state

12.1 MEANING AND OBJECTIVES

Meaning of Budget

A budget is a description of the spending and financing plans of an individual, a company or a government. The government budget shows the planned expenditure programmes of the government and the expected revenues from taxes and other sources during a given year. The budget contains a list of specific programmes like education, defence, welfare, etc. which give rise to government spending. It also contains tax sources like income tax, commodity tax, etc. which give revenues to the government. The revenue sources differ depending on the level of government (i.e. central, state and local). Although the central government collects most of the taxes, states and local governments also have a wide list of choices with respect to taxing.

When all taxes and other revenues exceed government expenditures for a given year, there is a budget surplus. When government expenditures exceed taxes and other revenues, there is a budget deficit. When revenues and expenditures are equal during a given year, the government has a balanced budget. Balanced budget is a rare phenomenon.

Fig. 12.1 shows government expenditure and revenue in relation to national income. Government expenditure is assumed constant and revenue is assumed to rise with national income. At the point E, budget is balanced. To the left of E the government budget is in deficit and to the right of E the budget is in surplus.

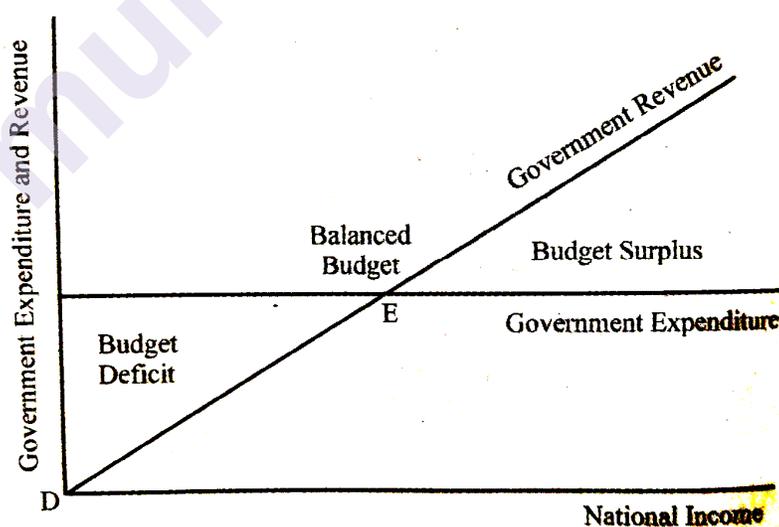


Fig. 12.1

When the government incurs a budget deficit, it is financed by borrowing. The government borrows from the public by issuing government bonds. This gives rise to government debt or public debt.

Objectives of Public Budget

In a laissez faire economy, with minimal government intervention, the public budget was considered merely a statement of receipts and expenditures of the government. The objective of the budget was to ensure that the government taxed as little as possible and that the revenue was sufficient to provide essential activities of the government. But as most laissez faire economies converted into welfare states, the budget was no longer considered to be a mere statement of receipts and expenditures, but became an important instrument of fiscal policy through which the government could fulfill many objectives. The functions and role of the government expanded to cover a very wide area and the primary objective of such functions is to promote general welfare of the people.

Some of the objectives of the public budget in any modern economy are :

- 1. Allocation of Resources :** This is the primary objective of any public budget. In order to fulfill all the other objectives, the government needs to first direct the allocation of resources in a desired manner. Resources are public or privately owned. In order to divert private resources to desired sectors, the government makes provisions in the budget that includes; (a) tax concessions; and (b) subsidies. For example, government may make provisions of both (a) and (b) for the MSME sector in order to encourage investment in this sector as the sector has large capacity to generate employment. In order to allocate public sector resources, the government directly invests in public sector undertakings like the railways, or public enterprises like oil refineries, fertilizer plants or in transport and other infrastructure. Resources are also diverted from undesirable sectors by levying higher indirect taxes and withdrawal of subsidies. All these can be done through budgetary provisions.
- 2. Reduction of Poverty and Income Inequalities :** The public budget is an instrument of reducing income inequality through progressive taxation, provision of social security benefits, subsidies on food, housing and education, provision of merit goods. In most developing economies, the government directly attacks poverty through poverty alleviation programmes. The public budget allocates funds for such expenditures. All these budgetary provisions are absolutely necessary to redistribute income and wealth and reduce inequality.
- 3. Economic growth :** Growth of the GDP results in more production and employment generation. Therefore, every nation tries to ensure a healthy rate of growth of the GDP as well as achieve balanced growth that benefits all sectors. The public budget can be used to achieve these objectives. Economic growth can be achieved through (a) mobilization of savings; (b) investment and capital formation; and (c) maintaining high level of effective demand. All these can be influenced by the budget. Tax incentives given to the people can

encourage them to save. Investments and capital formation are encouraged through business tax incentives, subsidies and government infrastructure spending. High level of effective demand is maintained by keeping direct tax rates low, better distribution of income through progressive taxation and subsidies, and social security expenditure and following contra-cyclical fiscal policy. All these can influence the growth rate of the GDP.

4. **Economic Stability** : Most economies experience fluctuations in the form of business cycles. Such fluctuations cause inflation recession and unemployment. To protect the economy from the adverse effects of the fluctuations and maintain stability in the economy, the budget can play an important role, particularly in a recession or depression. During recession, the automatic stabilizer in the fiscal system results in reeducation in tax collection and increase in social security expenditure. Besides, the government uses discretionary fiscal policy, like spending to create jobs. All these make the budget a deficit budget. On the other hand a surplus budget is followed during inflation. However, inflation can be better tackled with monetary policy than with fiscal policy. In order to ensure long term price stability, the government makes provisions in the budget to encourage production, like investment in agriculture through irrigation projects to increase food production and reduce food prices.
5. **Management of Public Enterprises** : Many developing economies have adopted the mixed economy system, where the government sector and the private sector both produce goods and services for the market. The objective of setting up public sector enterprises is to generate jobs, prevent private monopolies and provide people with essential goods and service at low prices. In order to maintain the public sector, regular budgetary provisions have to be made. Such provisions include raising taxes to make investments in public sector, as well as selling off unsustainable public sector enterprises through the process of disinvestment. All these budgetary provisions have an impact on the budget deficit and surplus.
6. **Employment Generation** : The budget is used to directly generate employment through government programmes, like the MNREGA in India, or by budgetary support to sectors like MSME and agriculture that generate large scale employment. Every year the government has to make budgetary provisions for employment generation programmes. In developed economies, the budget is used to maintain high level of effective demand in order to maintain high employment level.

The important types of public budgets are explained below.

1. **Balanced and Unbalanced Budget** : In a balanced budget the revenues are equal to expenditures. It has neither a budget deficit nor budget surplus. In the unbalanced budget, revenues and expenditures are not equal. When the revenues are greater than expenditure, we have surplus budget. On the other hand, when expenditure exceed revenues, there is a deficit budget.
2. **Zero based Budget and Traditional Budget** : In the traditional budget changes over the past years are to be justified, based on the assumption that the baseline is automatically approved. In the traditional budgets, incremental approach is used. Thus the programmes and projects of previous years are automatically continued and funded.

In zero based budget, every item of the budget must be approved, rather than only changes. In zero based budget every item has to be re-evaluated thoroughly starting from the zero base. In a zero based budget all expenses must be justified for each new year. The needs and costs of every function of the government department are taken into consideration for the next year's budget. It is used when resources are limited.

3. **Performance and Programme Budget** : Performance budget takes into account the end result or the performance of the programme or activity and thus ensures cost effective and efficient planning. It relies on three aspects, such as, understanding of the final outcome, the strategies formulated to reach those final outcomes and the specific activities that are to be carried out to achieve those outcomes. Since it involves a very detailed and objective analysis, this budgeting process is very result oriented and its approach. This type of budget is mostly used by the organizations and ministries involved in the developmental activities.

Programme budget is somewhat similar to performance budget. But, the programme budget is different in considering the programme as a unit. In this the major functions of the government is divided into specific programmes, activities and projects. The funds are allocated according to the achievements expected from each programme over a specific period. The emphasis is on the size of the programme, its implementation, costs involved and benefits expected from the programme. Thus this can be narrower than the performance budget.

4. **Multiple and Unified Budget** : Multiple budget is where the budget is divided into parts in such a way that each part highlights the specialized functions of the government showing their budgets. For

example, the Indian government presented the Railway budget and the Union budget separately.

Unified budget includes receipts from all sources and outlays for all programmes of the government. It is the most comprehensive measure of the government's annual finances. Unified budget is a single measure of the fiscal status of the government, based on the sum of all government activities. When many fund groups are consolidated to display budget totals, interfund transactions are deducted to avoid double counting. Now the Indian government has merged the railway budget with the general budget.

5. **Legislative and Executive Budget** : Legislative budget is prepared by the legislature directly or with the help of committees. A legislature consists of elected representatives of the government. It is a decision making organization that has the power to enact, amend and repeal laws. The executive budget is prepared by the executive wing of the government. The executive is responsible to the implementations of the budget proposals prepared by the legislatures and executives.
6. **Revenue Budget and Capital Budget** : Budget is also classified into revenue and capital budget.

The revenue budget covers those items which are of recurring in nature. The revenue budget shows both revenue receipts and revenue expenditures.

Revenue receipts consist of tax revenue and non-tax revenue. The two components of tax revenue are (i) revenue from direct taxes, and (ii) revenue from indirect taxes. Non tax revenue consists of interest and dividend on investments made by the government, fees, and other receipts for services rendered by the government.

Revenue expenditure is expenditure on maintaining existing level of public services. Such expenditures do not create any capital asset but help to maintain the existing assets. Revenue expenditure should ideally be met through revenue receipts and not through borrowings.

Capital budget consists of capital receipts and capital expenditures. The capital budget covers those items which are concerned with acquiring and disposal of capital assets. The purpose of capital expenditure is the expansion of present level of public services.

Capital receipts include funds received by the government in the form of market borrowings, small savings, provident funds, recovery of loans, external loans and disinvestment receipts and any other receipts from sale of government assets.

Capital expenditure includes repayment of debts and all expenditure incurred on creation of capital assets, like roads, railroads, irrigation and

power generation projects, establishment of schools, health care infrastructure, etc.

12.3 STRUCTURE OF UNION GOVERNMENT BUDGET OF INDIA

According to Constitution of India, there is a three-tier system of government, namely, Central (or Union) government, state government and local government (like Municipal Corporation, ZillaParishad, etc.). Accordingly, these governments prepare their own respective budgets (called Union Budget, State Budget and Municipal Budgets) containing estimates of expected revenue and proposed expenditure.

The basic structure of government budget is almost the same at all levels of government but items of expenditure and sources of revenue differ from budget to budget. We shall discuss here only the structure of the Central (Union) government budget briefly.

The Central Government is constitutionally required to lay an annual financial statement before both the houses of Parliament. This statement is conventionally called Government Budget. Accordingly, in India, every year Central (or Union) Budget for the coming financial year is presented by the Union Finance Minister in the Lok Sabha normally on the last working day of the month of February. (Let us assume Union Budget for the financial year 2016-2017 is presented in February 2015).

The Union Budget contains details of government receipts and expenditure for three consecutive years under the following heads.

1. Actual for the proceeding year (i.e. 2014-15 in this case).
2. Budget estimate for the current year (i.e. 2015-16).
3. Revised estimate for the current year (i.e. 2015-16)
4. Budget estimate for coming year (i.e. 2016-17).

Union budget is divided into two parts, i.e. Revenue budget and Capital budget. The revenue budget comprises revenue receipts and revenue expenditure. Capital budget consists of capital receipts and capital expenditure. The components of Union budget are presented in Chart 12.1 and Table 12.1 [Chart 12.1 and Table 12.1 are self explanatory].

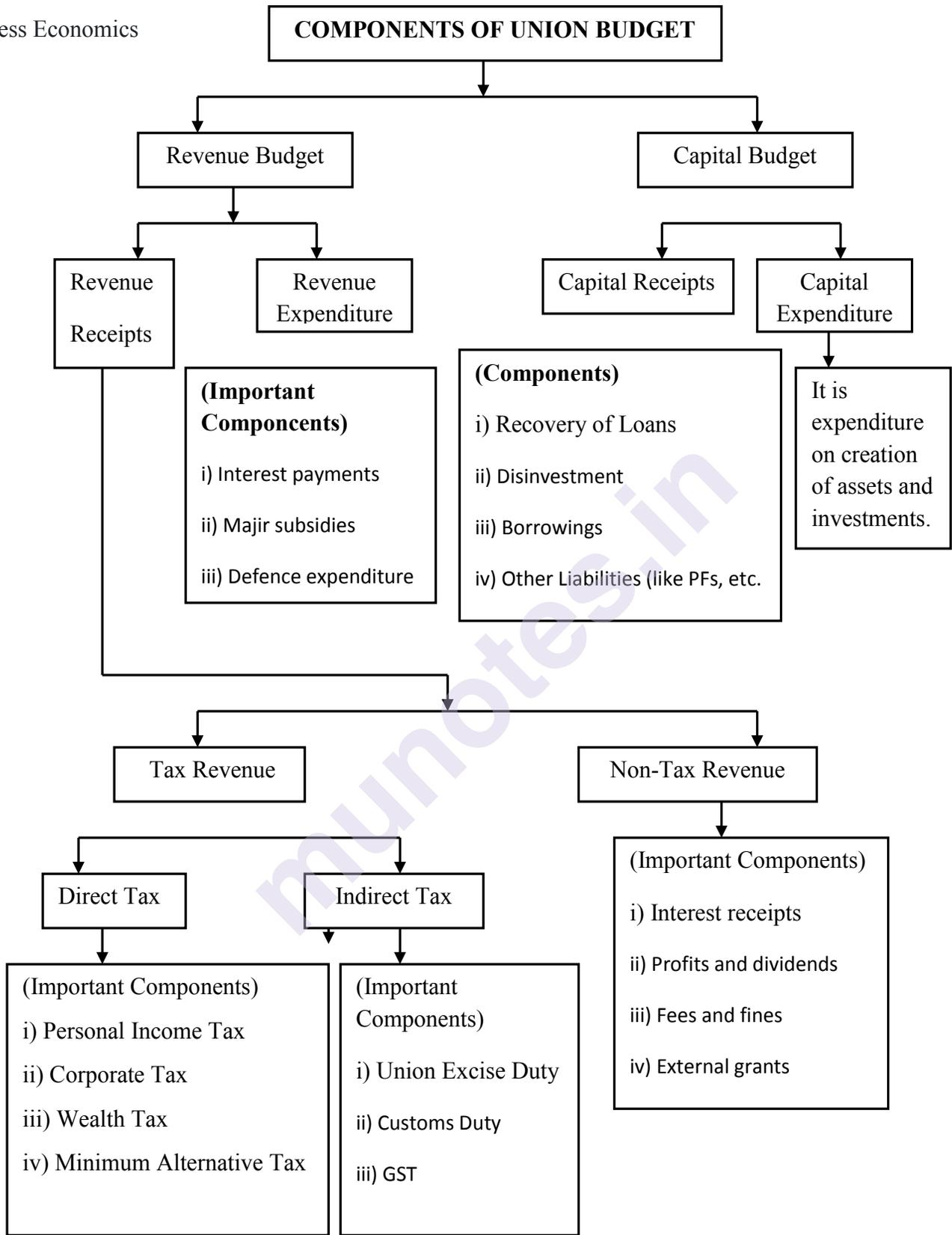


Chart 12.1: Components of Budget

The Union Budget at a glance (without figures) is also given in
Table 12.1

Public Budget, Deficit
and FRBM ACT 2003

Table 12.1 : Union Budget at a Glance 5

(Rs. Crore)

	Actuals for preceding year	Budget estimate for current year	Revised estimate for current year	Budget estimate for coming year
	2014-15	2015-16	2015-16	2016-17
1. Revenue receipts (2+3)				
2. Tax revenue (net to centre)				
3. Non tax revenue				
4. Capital receipts (5+6+7)				
5. Recoveries of loans				
6. Other receipts (include Disinvestments)				
7. Borrowings and Other liabilities				
12. Total Receipts (1+4)				
9. Revenue Expenditure (Important items)				
10. Interest payments				
11. Subsidies				
12. Defence spending				
13. Grants to states for Creation of capital Assets				
14. Capital Expenditure				
15. Total Expenditure (9+14)				
16. Revenue Deficit (9 – 1)				
17. Effective Revenue Deficit (16 – 13)				
112. Fiscal Deficit (15 – (1 + 5 + 6)]				
19. Primary Deficit (18 – 10)				

12.4 CONCEPTS OF DEFICIT

When the government expenditure exceeds revenues, the government has a deficit in the budget. Thus, the budget deficit is the excess of government expenditures over receipts. The government finances its deficit mainly by borrowing from the public through selling bonds on which government promises to pay specified amounts of interest. This gives rise to public debt. The deficit may also be financed by borrowing from the Central Bank of the country. This may give rise to increase in the money supply in the country. Thus, budget deficit causes the aggregate demand in the economy to rise and even lead to inflation. But deficits need to be incurred during recession to increase aggregate demand.

The important types of deficits are the following:

1. **Revenue Deficit :** Revenue deficit arises when revenue expenditure exceeds revenue receipts. The revenue receipts come from both direct and indirect taxes as well as from non tax sources like interest received on loans given, dividend and profits of public enterprise, fees, etc. They represent transfer of purchasing power from individuals to government. The revenue expenditures consists of interest payments on public debt, civil administration, defence, subsidies on food, fertilizers, etc. and social services like education, health, etc.

The deficit or surplus in the revenue budget is carried over to the capital budget. Generally, a prudent public finance management should give rise to surplus in the revenue budget which could be used for financing development activities. However, in India for the last several years, there has been revenue deficit. This implies that for the last several years part of the government's consumption expenditure has been financed by borrowing.

The revenue deficit of the Union Government of India was Rs.3,54,015crore or 2.3 percent of GDP in 2016-17.

2. **Budgetary Deficit:** It is the difference between all receipts and expenditures of the government, both revenue and capital. This difference is met by the net addition to the treasury bills issued by the RBI and drawing down of cash balances kept with the RBI. This is called deficit financing by the government of India. This deficit adds to money supply in the economy and, therefore, it can be a major cause of inflationary rise in prices. This concept is not used by the government in the recent years.
3. **Fiscal Deficit:** Fiscal deficit is the excess of total government expenditure (both revenue and capital) over revenue receipts and non-borrowing capital receipts, like recovery of loans, sale proceeds from disinvested government assets. It is the most comprehensive measurement of the budgetary imbalance. It measures the entire short-fall in the fiscal operations of the government.

Fiscal Deficit = Total Expenditure – Total Receipts net of borrowings.

Fiscal deficit is financed by borrowing both internally and externally and incurring other liabilities like draw-down of cash balances with the central bank. However, according to the provisions of the Fiscal Responsibility and Budget Management Act 2003, the RBI is not to lend to the Government of India by subscribing to primary issues of the Central Government securities since 2006-07.

The fiscal deficit of the Union Government of India was Rs.5,33904crore of 3.5 percent of GDP in 2016-17.

4. **Primary Deficit:** The fiscal deficit may be decomposed into primary deficit and interest payments. The primary deficit is obtained by deducting interest payments from the fiscal deficit. Thus, primary deficit is equal to fiscal deficit less interest payments. It indicates the real position of the government finances it excludes the interest burden of the loans taken in the past.

Primary deficit = Fiscal deficit – Interest Payments

Primary deficit of the Union Government of India in 2016-17 was Rs.41,234Crore or 0.3 percent of GDP.

5. **Monetised Deficit:** It is the sum of the net increase in holdings of treasury bills of the RBI and its contributions to the market borrowing of the government. It shows the increases in net RBI credit to the government. It creates equivalent increase in high powered money or reserve money in the economy and hence leads to rise in money supply. This concept is also not used by the government in the recent years.
6. **Effective Revenue Deficit:** This concept was introduced by the government in the Budget Proposal for 2011-12. Effective revenue deficit is equal to revenue deficit minus grants for creation of capital assets. The revenue expenditure of the centre includes grants given to states for the creation of capital assets. Thus, by excluding grants for the creation of capital assets from revenue deficit we get the concept of effective revenue deficit.

Effective revenue deficit of the Union Government of India in 2016-17 was Rs.1,87175crore or 1.2 percent of GDP.

In the Union Budget Government uses 4 concepts of deficits namely, revenue deficit, effective revenue deficit, fiscal deficit and primary deficit (see Table 12.1)

12.5 FRBM ACT 2003

The fiscal situation in India had been under mounting pressure especially since 1980s, because the finances of the central government as well as state governments had been in a bad shape. The long term trend in the government finances indicated that the revenue generation has been lower than the expenditure requirements, resulting in persistent and huge revenue deficit as well as fiscal deficit. This resulted in mounting debt accumulation and rising interest payments leading to fiscal crisis at the beginning of the nineties.

The fiscal imbalance was related to rising debt servicing obligations of the central government. Debt service payments of central government had risen exorbitantly from about 30 percent of tax revenue in 1980-85 to about 70 percent in 2002. As a proportion of total revenue receipts, debt service had increased from about 24 percent in 1980-85 to about 50 percent in 2002. As a proportion of GDP, debt service payments have increased from about 2.2 percent in 1980-85 to about 5 percent in 2004.

Another consequence of rising debt service was that the revenue deficit had increased from about 17 percent as a proportion of fiscal deficit in 1980-85 to about 50 percent in 2002. In another words, half of the current borrowing was going to finance current expenditure. Since current expenditure yields to economic returns in the future, debt service payments will continue to rise in future unless a significant correction is made in this regard.

The presence of fiscal crisis was affecting the objectives of promotion of capital formation and high sustained economic growth. It was felt necessary to have a permanent frame work for a rule-based fiscal discipline. For this purpose the Fiscal Responsibility and Budget Management (FRBM) Act was passed in 2003.

12.5.1 Fiscal Responsibility and Budget Management (FRBM) Act 2003

The Fiscal Responsibility and Budget Management (FRBM) Bill was initially introduced in Lok Sabha in December 2000. This bill was referred to the Parliamentary Standing Committee on Finance. A revised Bill was introduced in April 2003. It was passed in Lok Sabha in May 2003 and in Rajya Sabha in August 2003. After receiving the assent of the President, it became an Act in August 2003. The Act became effective from July 5, 2004.

12.5.2 Major Features of Fiscal Responsibility and Budget Management Act

The important features of the Act are related to :

- Fiscal Responsibility and Budget Management Rules

- Borrowing from Reserve Bank of India
- Measures for Fiscal Transparency
- Measures to Enforce Compliance of Rules

The above features are explained below –

1. Fiscal Responsibility and Budget Management Rules : The central government has to take appropriate measures to eliminate the revenue deficit and fiscal deficit and build up adequate revenue surplus. In particular the Central government has to take the following measures :

- (i) Reduce Revenue deficit by 0.5 percent or more of the GDP at the end of each financial year beginning with 2004-05.
- (ii) Reduce Fiscal deficit by 0.3 percent or more of the GDP at the end of each financial year beginning with 2004-05
- (iii) There should be no additional liabilities (including external debt at current exchange rate) in excess of 9 per cent of GDP for the financial year 2004-05 and progressive reduction of this limit by at least one percentage point of GDP in each subsequent year.
- (iv) In the medium term fiscal policy statement fiscal indicators namely Revenue Deficit, Fiscal Deficit, tax revenue and total outstanding liabilities as percentage of GDP are to be projected.
- (v) For greater transparency in the budgetary process, FRBM rules mandate the Central Government to disclose changes, if any, in accounting standards, policies and practices that have a bearing on fiscal indicators.

Exceptions: It is accepted that Revenue deficit and Gross fiscal deficit may exceed the limits on account of unforeseen demands on the finances of the central government due to national security or natural calamity. However, such slippage in the targets of revenue deficit and gross fiscal deficit must be explained to the parliament as soon as such a slippage occurs.

2. Borrowing from Reserve Bank: The central government shall not borrow from the RBI. However, the central government may borrow from the RBI by way of advances to meet temporary excess of cash disbursement over cash receipts during any financial year in accordance with the agreements which may be entered into by the government with RBI. This essentially means that the RBI will not be a handmaiden of the finance ministry and it need not follow an accommodating monetary policy.

Reserve Bank of India is not to subscribe to the primary issues of the Central Government securities from the year 2006-07.

3. Measures for Fiscal Transparency :

- (i) The central government shall take suitable measures to ensure greater transparency in its fiscal operations and minimize, as far as practicable, secrecy in the preparation of the annual budget.
- (ii) The central government should disclose significant changes in the accounting standards, policies and practices affecting or likely to affect the computation of prescribed fiscal indicators.

4. Measures to Enforce Compliance of Rules :

- (i) The finance minister shall review, every quarter, the trends in receipts and expenditure in relation to the budget and place before both houses of parliament the outcome of such reviews.
- (ii) In case of shortfall in revenue or excess of expenditure over pre-specified levels during any period in a financial year, the central government shall proportionately curtail the sums authorized to be paid.
- (iii) The finance minister shall make a statement in both houses of parliament explaining the following :
 - (a) Any deviation in meeting the obligations cast on the central government under this Act; and
 - (b) The remedial measures the central government proposes to take.

12.5.3 Limitations of FRBM Act

Although the FRBM Act shows that the government is serious about reducing fiscal deficit, it has the following limitations.

1. **Target regarding Gross Fiscal Deficit very Stringent :** The FRBM Act stipulates that by March 31, 2006, the gross fiscal deficit as a proportion of GDP must be 2 percent. This, of course, means that the government can borrow from the economy only to the extent of 2 percent of GDP, whatever be the level of savings. The question is whether this level of government borrowings is enough for a developing economy like India that wishes to hasten the process of its development. The rear problem that the economy faces is the presence of large revenue deficits.
2. **Possible Neglect of Social Sector Spending :** The most significant portion of spending on the social sector takes place on the revenue account. Capital expenditure on this sector is very small. The social

sector spending especially on basic health and basic education involves important externalities. The presence of such externalities makes subsidization of social sector spending desirable. The FRBM Act rules may lead to neglect of social sector.

3. **Need to Increase Revenues** : Revenue deficits are determined by the interplay of expenditures and revenues, both tax and non-tax. Very often, attention gets focused only on the expenditure side of the identity to the neglect of the revenue side. Enough attention is not given for increasing tax and non tax revenues in the FRBM Act.
4. **Zero Primary Deficit** :The FRBM Act does not have anything to say about Primary Deficit (PD) which is defined as the difference between gross fiscal deficit and Interest Payments. It has been argued that the interest payments component of government expenditure reflects the impact of past debts and cannot be reduced. Hence, it makes sense to focus on only those components of the gross fiscal deficit, which are amenable to reduction. Consequently, the focus should be on PD and targets must be set for it. Thus initial target would be to get PD down to zero, so that current operations of the government would not create additional debt.
5. **Non-coverage of State Governments** :The provisions of the FRBM Act impose restrictions on only the central government but state governments are out of its scope. But, deficits of state governments are as much or even a greater problem. Hence it will be necessary that state governments also make similar commitments to pursue fiscal discipline. Though a few states have enacted fiscal responsibility legislation, majority of states are yet to follow suit.
6. **Neglect of Development Needs** : Today, the levels of capital expenditures by the government are miserably low in India. These capital expenditures increase the efficiency and productivity of private investment and thus contribute to the development process in the country. If gross fiscal deficit is reduced to 2 percent of GDP as per the requirement of FRBM Act, it is the capital expenditure which will be sacrificed and thus will hinder further development of the country.

12.6 GOVERNMENTS CAN BE CLASSIFIED INTO UNITARY AND FEDERAL GOVERNMENTS.

- (a) **Unitary Government** :In a unitary government set-up, all the affairs of the entire country are conducted by a single government. Most or all the governing powers are with the central government, which may delegate some power to the regional and local authorities. Some of the examples of unitary states are the UK, France, Italy and China. Majority of the countries in the world have unitary form of government.

- (b) **Federal Government** : In a federal form of government, the affairs of the country are conducted by the authorities of different levels of government. The governing power is shared between the national or central government and state or provincial governments. Some of the major countries that follow the federal form of government are India, the USA, Canada, Germany and Australia. Some of the advantages of the federal system are, administrative efficiency, sharing and raising of revenue, protecting cultural and regional identities of regions. Some of the problems faced by federal governments are related to maintaining a balance between central and the state government in sharing administrative power and financial resources. Sharing of financial resources comes under the concept of fiscal federalism.

12.7 FISCAL FEDERALISM

Meaning of Fiscal Federalism

It is the study of how expenditures and revenues are allocated across different layers of administration i.e. Central government, state and local governments. It is concerned with understanding which functions and instruments are best decentralized.

According to Joseph E. Stiglitz, fiscal federalism is concerned with the division of economic responsibilities between the Central (or federal) government and the states and local governments. Federalism covers issues that go beyond economics.

Key Issues under Fiscal Federalism

1. **Division of Responsibilities and Resources** : The main issues of fiscal federalism are concerned with the division of responsibilities and resources between the central government and the states and local governments. There are two important issues :
 - (i) Who makes the decisions about the programmes? And
 - (ii) Who pays for the programmes?

In some cases, the central government pays for a programme and gives broad discretion to the states regarding how to carry out the programme. In other cases, the central government essentially dictates all the terms and the states simply administer the programmes.

Just as there is a division of responsibility between the central government and state and local governments, there is also a division of responsibilities between the state governments and local governments. The division is complicated one, involving financing, regulation and administration.

According to the traditional theory of fiscal federalism given by R.A. Musgrave and others, the central government should have the basic responsibility for the macroeconomic stabilization function and for income

redistribution. In addition to these functions, the central government must provide certain national public goods like defence that provide services to the entire population of the country. The state and local governments should be concerned with the provision of goods and services whose consumption is limited to their own jurisdictions.

2. **Regulation:** The constitution restricts the laws that states can pass. Similarly, state and local governments may also be subject to the same pollution and environmental regulations that apply to private firms and individual. Sometimes the central government has mandated that state and local governments provide certain service without providing the requisite funds. All these may give rise to problems in the federation.
3. **Incentives for Resource Transfer:** Sometimes the central government imposes its will through eligibility requirements for grants and loans, etc. This leads to disparity in the allocation of grants to states. The intention of central government aid to local government is to encourage local spending on particular public services. The central government uses this power to transfer resources to enforce national rules and standards.
4. **Tax Expenditures:** One of the important ways that the central government affects state and local expenditures is through the sharing of central tax revenues with the states. This can provide an incentive for greater expenditures at the state and local level.
5. **National and Local Public Goods:** One of the important factor influencing fiscal federalism is difference between national public goods and local public goods. In the case of national public goods benefits accrue to everyone in the nation, e.g. national defence. In contrast, the benefits of local public goods accrue to the residents of a particular locality, e.g. traffic lights, fire protection, etc. While some argue that the central government should provide certain public goods locally, some argue for assigning greater responsibility for the provision of public goods at the local level.

There is a presumption that the central government should provide national public goods. The question is whether the provision of local public goods should be left to state and local governments. It is argued that competition among communities will result in local governments supplying and producing local public goods and services individual want in an efficient manner.

6. **Tax Competition:** If the local governments use tax incentives to attract businesses and to increase employment opportunities, gains in one locality or state are partly at the expense of losses in other localities or states. But the competition to attract businesses results in lower taxes for businesses. Thus, at the end businesses are the ultimate beneficiaries.

- 7. Tax Subsidies:** Tax subsidies lead to increased expenditures on publicly provided goods and increased capital investment by state and local governments. At the same time, tax subsidies are an inefficient way of subsidizing state and local governments due to following reasons :
- (i) Some of the benefits accrues to wealthy investors rather than to the communities.
 - (ii) Some of the benefits is passed on to the businesses and not to the residents of the communities.
 - (iii) Tax subsidies discriminate in favour of higher income individuals who have a strong preference for publicly provided goods.
- 8. Financial Imbalance:** One of the main issue in the federal set-up is the financial imbalances. Financial imbalance means lack of harmony between functions and financial resources.

The sources of revenue assigned to the centre and the states should be adequate to enable them to fulfill the functions allotted to them. It is very likely that the needs and resources of each government will not be balanced. Therefore, it is necessary to evolve mechanisms which can be used to even out the shortages and surpluses. One such mechanism is fiscal decentralization.

12.8 FISCAL DECENTRALIZATION

Decentralisation in general, is an ongoing and gradual process whereby, political, administrative and fiscal powers are transferred from the central government to the state and local governments. Fiscal decentralization refers to the transfer of taxing and expenditure powers from the control of central government to government authorities at sub-national levels (state and local governments). The main purpose of decentralization is improved administration, better accountability, larger participation in the democratic process by people and ultimately generation of economic welfare.

Components of fiscal decentralization are :

- 1. Expenditure Sharing :** The central government in a federal system, transfers the public expenditure responsibilities to the lower levels of government. Each state government has unique public expenditure obligations depending upon the needs of their people. In most cases, the state government is responsible for social sector expenditure on education and health, child and youth welfare, subsidized housing. In some cases part of the funding for such expenditure may come from the central government. State governments are also responsible for building roads and other economic infrastructure that benefit the people of the state. The maintenance costs of such infrastructures are

generally covered by local taxes, user charges like road tolls, fees and central government grants.

2. **Tax Sharing** : Some taxes are levied by the central government and part of the proceeds is transferred to the state governments. Tax-sharing is advantageous because, when tax is collected by one authority it brings in uniformity of tax rate, makes collection easier and lowers cost of collection. In India, the central government collects personal and corporate income tax and shares the proceeds with the state government. The mode of sharing tax differs from country to country. In some countries, the central government collects taxes and shares the entire proceeds with the state or regional governments after deducting the cost of collection. In some cases the taxes are shared on the basis of the states respective contribution to tax generating activities or the size of population. The mode of tax sharing is reviewed from time to time and undergoes changes whenever required. This is necessary for bringing in flexibility in the fiscal decentralization process. In India, a Finance Commission is constituted periodically to examine this.
3. **Supplementary Levies** : Supplementary levies are imposed over and above a main tax. Cess and surcharges are examples of such levies. These are imposed by the central government and proceeds are distributed to the lower local governments.
4. **Local Taxes** :These local governments have the power to impose and collect taxes usually on property, sale of goods and services, movement of goods, and in some cases even on income. Such powers are a part of fiscal decentralization. Collection of these taxes provides greater autonomy to local governments to carry out expenditures to meet the needs of the local population.
5. **User Charges** :In many cases, local governments supplement their tax collection by charging user charges and fees from the people for use of local infrastructure. Examples of these are road tolls, fees for using public spaces like parks, museums, art galleries etc.
6. **Inter-Government Transfers of Grants** : Grants in aid are provided by the central government to the state governments to meet additional need for funds for services they have to provide. Grants are classified as (a) outright or untargeted grants given to bridge the gap between current revenues and expenditure of the state government and there are no conditions attached to these grants, and (b) targeted or conditional grants to meet specific expenditures, like provision of primary education or primary health care Grants are given in order to avoid the imposition of state tax burden on the people. They are provided to reduce regional imbalances which are common in developing economies. Backward and under developed states get a larger share of grants in order to bring them on par with other states. This benefits the entire nation. Some states have lower capacity to generate revenue

through taxes due to lower level of economic activities. Such fiscal gap between different states are sought to be filled through grants.

7. **Loans** : Loans are necessary to finance large capital expenditure. Large infrastructure related expenditure cannot be funded through revenue receipts. The central governments provide loans to the state government to meet such expenditures either fully or partially. Such loans are expected to be used for productive purposes so that they are self-liquidating, that is, they generate income to repay the loans. The rates of interest on such loans are usually lower than the market rates.

12.9 CENTRE-STATE FINANCIAL RELATIONS IN INDIA

The constitution of India has clearly laid down the division of responsibilities (functions) involving expenditure and division of powers to raise resources between the centre and the states as also local bodies.

A. Division of Functions

The principle underlying the division of functions assigns countrywide tasks to the centre and state/region. Similarly the tasks of local importance are assigned to municipalities in towns and panchayats in villages.

Central Government Functions : The several functions of the central government are classified into developmental and non developmental functions. Developmental functions are the ones which promote growth and welfare and welfare of the people, for e.g. provision of social and community services (education, public health, science and technology, labour and employment etc.) economic services (agriculture and allied services, industry and minerals, transport and communications, foreign trade etc.); and grants in aid to states for developmental purposes.

Non developmental functions include maintenance of law and order (police, defence); maintenance of external relations; grants to states for non developmental purposes.

State Government Functions : The various responsibilities of the states are also grouped under two categories : developmental and non developmental. Developmental functions include : social and community services; economic services etc.

Non developmental functions include administrative services, payment of pensions, interest payments on loans.

Justification for the Division

The above mentioned division of functions is justified on the following grounds:

- (i) Defence and communication services are to be provided uniformly throughout the country and thus should be the responsibility of the centre.
- (ii) Benefits accrue due to economies of scale in the provision of these services due to the large size of the country.
- (iii) Critical areas such as foreign investment and foreign trade, which require a national agenda, are with the centre.
- (iv) Further, services which differ from region like agriculture, are assigned to the states.

Problems

The existing division of functions has the following problems :

1. There is over lapping of functions in important areas like education and health.
2. Many of the centrally sponsored schemes do not provide the required freedom and autonomy to the regions in respect to their designing and implementation and thus do not benefit the targeted groups.

B. Division of Resource Raising Powers

To meet the expenditures involved in the performance of functions, the governments at different levels have been assigned powers to raise resources.

Receipts of Central Government : There are various sources of receipts of the central government classified into revenue receipts and capital receipts. Among the revenue receipts the most important is the tax revenue. A part of the tax receipts is statutorily transferred to the states as per the recommendations of the Finance Commission. **The various types of taxes allotted to the centre may be listed under three categories :**

- **Taxes on income** and expenditure, which include income tax, corporation tax and expenditure tax.
- **Taxes on property** and capital transactions which cover estate duty, wealth tax etc.
- **Taxes on commodities** : A major change in the indirect tax structure was made with the implementation of The Goods and Services Tax (GST) on 1 July 2017. Since GST is a destination based tax, an end user consuming any goods or services is liable to pay it. The tax is received by the State in which the goods or services are consumed and not by the state in which such goods are manufactured.

- (i) **Central GST (CGST)** is a tax levied on intra-state supplies of both goods and services by the central government and governed by the CGST Act.
- (ii) **State GST (SGST)** will also be levied on the same intra-state supply, but will be governed by the state government. This implies that both the Central and the State governments will agree on combining their levies with an appropriate proportion for revenue sharing between them.
- (iii) **Integrated GST (IGST)** is a tax levied on all inter-state supplies of goods and services and will be governed by the IGST Act. Tax will be shared between central and state governments.

Apart from tax revenue there are other sources of revenue receipts. These include dividends from railways, posts and telegraphs, RBI, public sector undertakings and foreign governments.

As regards capital receipts, the government has the legal power to borrow from the domestic as well as the international markets, as also from world institutions and foreign governments.

Receipts of State Government: Like those of the Centre, receipts of states are classified into revenue and capital receipts. The revenue receipts come mainly from taxes on agricultural income, profession tax, property and capital transactions like stamp and registration, land revenue, urban immovable property tax and surcharge on cash crops. Besides these direct taxes, states have the power to levy indirect taxes like those on commodities and services such as GST.

Besides tax revenue, states have other sources of receipts on revenue account. These are non-tax revenues such as interest receipts, dividends from state enterprises etc.

Then there are receipts on capital account, which are loans taken from the market in the form of bonds and securities, and loans, which flow from the centre.

In addition there are receipts like share in central taxes, grants in aid and other receipts of funds from the centre for centrally sponsored schemes (CSS).

Financial Imbalance

In spite of the clearcut division of the powers and the financial resources between the Centre and states, there is an imbalance in the division of resources. This imbalance is in favour of the Centre. It has been observed that while the responsibilities of the states have increased over the years, their revenue resources have not increased substantially.

Transfer of Resources from Centre to States

The constitution itself has recognized the finance inadequacy of states and, therefore, the constitution has made a provision for the transfer of resources from the centre to states. These transfers are of three types :

1. Transfer of a part of tax proceeds from centre to the states. This is done through the agency of Finance Commission.
2. Transfer in the form of grants and loan from centre to states. These too are done through the Finance Commission.
3. Transfer in the form of plan assistance for plan projects. This takes place through the planning commission.

The above scheme of transfer does not solve the problem of financial imbalance.

C. Finance Commissions

Article 280 of the Constitution of India has made provision for the appointment of a Finance Commission. The Finance Commission (Miscellaneous Provisions) Act was passed in 1951. According to the provisions of the Act, the Commission is appointed every five years. It includes a chairperson and four other members.

The functions of the Finance Commissions are :

- (a) To recommend the distribution of net tax proceeds and allocation of shares of such proceeds between the Union and the States.
- (b) Grants in aid recommendations for covering the gap between current revenues and expenditures of the States, and for removal of regional disparities between the States. The Commission also recommends special purpose grants to any State.
- (c) The Finance Commission may look into and study specific problems and issues in the interest of healthy and sound financial relations between the Centre and States, on the advice of the President. These issues include extent of indebtedness of States, debt relief measures and special expenditures required to be made by States.

So far 14 Finance Commissions have been constituted. The 14th Finance Commission was constituted in January 2014 under the chairmanship of Dr. Y.V. Reddy, former governor of the RBI. The Commission submitted its report to then president Pranab Mukherjee in December 2014. The Government of India has accepted the recommendations of the Commission for the period 2015-16 to 2019-20.

Some of the major recommendations of the 14th Finance Commission that have been accepted by the Government of India are :

1. States' share in the net proceeds of Union tax revenue to be increased from previous 32% to 42%.
2. Eight Centrally Sponsored Schemes (CSS) delinked from the Centre support. 30 such CSS have been identified, but have not yet been delinked from Centre support due to national priorities and legal obligations. [CSS are special purpose grants or loans given by Central Government to State Governments to plan and implement programmes to help achieve national goals and objectives. Some examples of CSS are Jawaharlal Nehru National Urban Renewal Mission (JNNURM), RashtriyaKrishiVikasYojana, SarvaShikshaAbhiyan, National Mission on AYUSH].
3. States to share higher fiscal responsibility for the existing CSS.
4. Revenue compensation to States under GST should be for five years; 100% in first three years, 75% in fourth year and 50% in the fifth year. States are expected to have lower tax collection due to imposition of GST.
5. An autonomous and independent GST Compensation Fund to be created.

12.10 SUMMARY

1. A budget is a description of the spending and financing plans of an individual, a company or a government. The government budget shows the planned expenditure programmes of the government and the expected revenues from taxes and other sources during a given year. The budget contains a list of specific programmes like education, defence, welfare, etc. which give rise to government spending. It also contains tax sources like income tax, commodity tax, etc. which give revenues to the government. The revenue sources differ depending on the level of government (i.e. central, state and local).
2. When all taxes and other revenues exceed government expenditures for a given year, there is a budget surplus. When government expenditures exceed taxes and other revenues, there is a budget deficit. When revenues and expenditures are equal during a given year, the government has a balanced budget. Balanced budget is a rare phenomenon.
3. Revenue expenditure is expenditure on maintaining existing level of public services. Such expenditures do not create any capital asset but help to maintain the existing assets. Revenue expenditure should ideally be met through revenue receipts and not through borrowings.
4. Capital budget consists of capital receipts and capital expenditures. The capital budget covers those items which are concerned with acquiring

and disposal of capital assets. The purpose of capital expenditure is the expansion of present level of public services.

5. Capital receipts include funds received by the government in the form of market borrowings, small savings, provident funds, recovery of loans, external loans and disinvestment receipts and any other receipts from sale of government assets.
6. Capital expenditure includes repayment of debts and all expenditure incurred on creation of capital assets, like roads, railroads, irrigation and power generation projects, establishment of schools, health care infrastructure, etc.
7. According to Constitution of India, there is a three-tier system of government, namely, Central (or Union) government, state government and local government (like Municipal Corporation, Zilla Parishad, etc.). Accordingly, these governments prepare their own respective budgets (called Union Budget, State Budget and Municipal Budgets) containing estimates of expected revenue and proposed expenditure.
12. When the government expenditure exceeds revenues, the government has a deficit in the budget. Thus, the budget deficit is the excess of government expenditures over receipts. The government finances its deficit mainly by borrowing from the public through selling bonds on which government promises to pay specified amounts of interest. This gives rise to public debt. The deficit may also be financed by borrowing from the Central Bank of the country. This may give rise to increase in the money supply in the country. Thus, budget deficit causes the aggregate demand in the economy to rise and even lead to inflation. But deficits need to be incurred during recession to increase aggregate demand.
9. The Fiscal Responsibility and Budget Management (FRBM) Bill was initially introduced in Lok Sabha in December 2000. This bill was referred to the Parliamentary Standing Committee on Finance. A revised Bill was introduced in April 2003. It was passed in Lok Sabha in May 2003 and in Rajya Sabha in August 2003. After receiving the assent of the President, it became an Act in August 2003. The Act became effective from July 5, 2004.
10. In a unitary government set-up, all the affairs of the entire country are conducted by a single government. Most or all the governing powers are with the central government, which may delegate some power to the regional and local authorities. Some of the examples of unitary states are the UK, France, Italy and China.
11. In a federal form of government, the affairs of the country are conducted by the authorities of different levels of government. The governing power is shared between the national or central government

and state or provincial governments. Some of the major countries that follow the federal form of government are India, the USA, Canada, Germany and Australia.

12. According to Joseph E. Stiglitz, fiscal federalism is concerned with the division of economic responsibilities between the Central (or federal) government and the states and local governments. Federalism covers issues that go beyond economics.
13. The constitution of India has clearly laid down the division of responsibilities (functions) involving expenditure and division of powers to raise resources between the centre and the states as also local bodies.

12.11 QUESTIONS

1. Discuss the objectives of public budget.
2. What are the different types of public budget?
3. Explain the structure of the Union Government of India's budget.
4. Discuss the types of deficit.
5. Discuss the features of FRBM Act 2003.
6. What are the limitations of FRBM Act 2003?
7. Explain the concept of fiscal federalism? Write down the key issues of it.
8. Write note on functions of finance commission.
9. Explain the concept of fiscal decentralization and write down its components.

