UUNIT-V

NATIONAL INCOME

MEANING AND DEFINITIONS OF NATIONAL INCOME

The National Income statistics is a very important index of the economic development of a country, the study of national income has become all the more important nowadays because of the increasing role given to the State in regulating economic activities. Every country calculates its national income to know

- How much it has changed ?
- What is the contribution of different sectors to the national income ?
- How is it distributed among the people ? and
- How is it used for further economic development ?

In real terms, national income or national product refers to the total money value of the output of all types of goods and services produced and sold in a country during a year and expressed in terms of prices. Since national income is a flow of money value of goods and services, it is always estimated with reference a specific period of time, normally a year.

According to Pigou, national income is that part of the objective income of the community including, course, income derived from abroad, which can be measured in money.

NATIONAL INCOME AND ITS FEATURES

National income is defined as the sum total of the money value of all the goods and services produced a country in one year. It should be expressed in terms of money, without duplication.

Features:

(1) National income is a macro economic concept: Macro means large. It deals with the whole economy. National income is concerned with aggregate or the economy as a whole. Hence National Income a macro economic concept.

(2) National income is a flow concept: Income is a flow while wealth is a stock. Wealth can be compared to a lake at the top of a mountain while income is

like a rivulet; which flows down 'from the lake. Hydro-electric power station is a national wealth. But the electricity which it generates is national income.

(3) **National income is a realised flow:** National income means the sum total of the money value of all the goods and services that have been already produced in the country in that year.

(4) **National income is expressed over a period of time :** It is expressed per year or annually. Income being a flow concept, has to be expressed over a period of time.

(5) **National income is the money value:** National income cannot be expressed in terms of different goods. We cannot add benches to fans, refrigerators or televisions. The value of all the goods should be expressed in a common denominator i.e. money. That is why India's national income is expressed as so many crores of rupees.

(6) **National income should avoid double counting:** If the value of the same thing is taken twice, there will be double counting and so the national income will be inflated. To avoid double counting the value of only final goods (goods made available to the consumers) will be taken. Value of semi-produced and intermediary goods should not be taken.

(7) **National income is a net aggregate:** When the goods are produced, existing raw materials are used and the capital items are having wearing and tearing off. Such losses have to be deducted from the gross value of the goods produced, to get the national income. National income is the net addition made to the existing goods and services.

(8) **Value of Government services is added:** In the modern times, every country has a Government. The Government may collect money from the people in the form of various taxes and borrowing. This money is used for the production of goods and services through Government enterprises and Government organisations. The value of these should be taken for the calculation of national income.

(9) **Net income from abroad is to be included:** In an open economy with international transactions, the net value of exports (X) and imports (M) should be added to get the national income. The people of a country may have

employment, property and investment abroad. For this receipts, (R) have to be got from abroad in the form of rent, wages, interest and dividends. Similar payments (P) this country will have to make to the foreigners for their property, work and investment. The net of this (R-P) also should be taken for the calculation of the national income.

The concept of national income has three interpretations. It represents a receipts total, an expenditure total, and a total value of production over the course of one year.

Concepts of National Income:

(a) Gross National Product (GNP): This is defined as the total market value of all final goods and services produced in a year. It includes the value of consumer goods, capital goods, net foreign investment and value of Government services.

GNP = C+I+G+ (X - M) + (R - P)

(b) Gross Domestic Product (GDP): It is defined as the value of all goods and services produced in a year within the geographical boundaries of a country.

(c) Net National Product (NNP) : Net National product is equal to the gross national product minus depreciation. Depreciation is the fall in value of capital due to wear and tear of capital.

NNP = GNP - Depreciation.

(d) Net National Product at factor price:

NNP at factor prices = NNP- indirect taxes + subsidies.

(e) Personal Income (P.I.): It is the sum of all incomes actually received by an individual during a year.

(f) Disposable Personal Income (DPI): It is the amount of money available to an individual in a year for the purpose of spending

DPI = PI - Personal Taxes.

Methods of calculating National Income:

National product or income can be regarded as (a) As a sum of products flowing from different sectors of an economy (b) as a sum of incomes derived by the productive factors and (c) as a sum of expenditure on the consumption goods and investment

goods. Hence there are three methods of computing national product i.e.-

(a) Aggregate Output method.

(b) Aggregate Income method.

(c) Aggregate Expenditure method.

AGGREGATE OUTPUT METHOD

To calculate national product by this method, we must first calculate the Gross National Product (GNP) and then arrive at the net national product (NNP) or net national income.

The GNP refers to the money value of the entire national output of all types of goods and services, produced in a country during a year. While calculating the GNP, it is necessary to avoid double counting. Hence this method is called the value-added method.

Gross National Product (GNP) or Gross National Income at Market Prices: The GNP of a country consists of goods and services which can be classified into four categories as explained below :

(1) **Consumption Goods and Services:** The money value of all types of consumer goods, durables as well as perishable, including the services directly rendered to consumers, is estimated. The rent paid to landlords, the rental value of the owner-occupied houses, the value of goods purchased from public enterprises, the value of goods retained by their producers for their own consumption, the value of food and clothing given by employers to their employees, must be included. However the services of a housewife and other services freely rendered are not included. This is because they are not exchanged for money. So also the value of second hand goods is not included. This is because they are not a part of the current output.

(2) **Gross Private Domestic Investment:** The money value of all types of capital goods, inventories including raw materials, and new buildings constructed during the year is included in the GNP.

(3) **Government Purchases :** The money value of goods and services purchased by a Government is also included in the GNP. The value of the Government services can be calculated on the basis of the total amount of

the Government expenditure during a year, except the value of goods directly sold to the consumers by public enterprises for such goods fall in the consumer goods category.

However, all the payments made by a Government in the nature of transfer expenditure such as old age pensions is not to be included in the gross national output. This is because they do not create factor incomes, i.e. they are not payments for current productive services or for current goods.

(4) **Net Foreign Investment :** A net difference between the total receipts from and the total payments to foreign countries due to exports and imports of goods and services and other international economic transactions during a year, must be included in the gross national output.

The above four items together constitute the GNP at market prices.

Net National Product (NNP) or Net National Income at Market Prices :

The NNP at market prices is also called national income at Market Prices. We can arrive at the NNP at market prices by making the deductions of capital consumption or depreciation reserves from the GNP at market prices.

From the NNP at market prices, we must deduct the amount of "indirect taxes" and add the amount of "subsidies" so as to get the NNP at factor cost. The NNP at factor cost is also called national income at factor cost.

Thus the national income at market prices differs from the national income at factor cost due to the consideration of indirect taxes and subsidies. If indirect taxes are included in the NNP and subsidies are excluded from it, we get the national income at market prices.

To get the NNP at factor cost, the indirect taxes like sales taxes must be deducted because they are included in the GNP twice - once while calculating the value of consumer goods and secondly, while calculating the value of the Government services. But the direct taxes do not affect the prices of goods and enter into national product only once when they are used by the Government to buy goods and services. Hence they must not be excluded.

At the same time, it is necessary to add subsidies for they reduce the prices of goods and services below their cost of production. So they are not reflected either in the

commodity prices or in the public expenditure.

However, the following precautions must be taken while calculating national income by the output method.

(i) The value of the national output of any year must be expressed in terms of prices in some base year, i.e. sprices in some past year so as to get an idea of the changes in national output in real terms.

(ii) Care must also be taken to avoid double counting.

(iii) The expenditures incurred by private firms in the form of old age pensions, sickness benefits, etc., must be deducted. This is because they are reflected in the prices of consumer goods even though they are not paid for any productive work during the year.

(iv) We must also subtract depreciation of capital assets from the value of gross investment during the year.

(v) Care should be taken to include the net factor income from international transactions during the year.

An imaginary example of calculating national income by output method is given below: (Rs. crores)

(1)	Total value of the consumer goods (C)	+	Rs.5000	Crores
(2)	Total gross value of the capital goods (I)	+	Rs.5000	Crores
(3)	Total value of the goods and services purchased by the Government (G)	+	Rs.2000	Crores
(4)	Export-Import(X-M)(Rs.2000)(Rs.l500)	+	Rs.500	Crores
(5)	Net foreign investment (R-P)	+	Rs.1000	Crores
	GNP	=	Rs.13500	Crores
	Less: Depreciation or capital consumption (D)	-	Rs.1500	Crores
	NNP at market price	=	Rs.12000	Crores
	Less: Indirect taxes	-	Rs.1000	Crores
	Add: Subsidies	+	Rs. 500	Crores

National income at factor price - Rs.11500 Crores

AGGREGATE INCOME METHOD

The second method of computing national income is to add together the incomes of all persons and organisations including public bodies from all sources, in the country during a year. National income is an aggregate of income distributed by way of factor payments including the net factor income from abroad. So the national income by this method is obtained by adding together all the following factor incomes:

(1) Labour incomes (Wages): This item includes (a) salaries and wages including the cash, bonuses and commissions (b) supplements to the labour income such as employer's contribution to the social security (c) compensations in kind such as free lodging and boarding etc,

(2) Rental Value: The rental values of all self occupied houses and net rentals received by persons from real property are added together in this item.

(3) Corporation Profits : This is the income from investments. This is the total of the net profits distributed to the share holders and the income kept as reserves or undistributed profits.

(4) Net Interest: The Net interest received by individuals from private business and the net interest received from the Government from certain types of loans.

(5) Mixed Type of Income: Another type is mixed income received by the self employed persons who usually supply more than one type of factor units such as their own capital, own land, and own labour.

(6) Net Income from Abroad: It refers to the net difference between the total receipts from and the total payments to foreign countries due to exports and import of goods and services and other income transactions with foreign countries during the year.

(7) The Net Profits of Government Enterprises: There are Government enterprises and services whose income are to be calculated for the current year. When we make a total of all these items mentioned, and do the adjustments on it we calculate the national income through this method.

Following are the precautions to be taken while calculating national income through this method: Care should be taken, not to include the following items in calculation :

- All kinds of transfer payments.
- All unpaid services.
- Investment in share and income received from the sale of the property one owns.
- Direct income taxes.
- Interest received by the individuals on the loan given to the Government for consumption and war purpose.
- Subsidy should be deducted from the profits of the companies. Income method of estimating National Income adds up the following:
- Wages and salaries.
- Net income of self-employed people.
- Undistributed profits of private enterprises.
- Net profits of public sector enterprises.
- Net interest received on loans.
- Net income from abroad.

Estimation of national income by income method can be illustrated by the following imaginary example:

	Items	**Rupees in crores**
(1)	Wages and Salaries	20,000

(2)	Income from self employment	5,000
(3)	Rent	6,000
(4)	Profit from private enterprise	8,000
(5)	Interest	1,000
(6)	Income from public enterprises	2,000
		42,000
	Add : (Gross Domestic Income) G.D.I.	2,000
(7)	Net income from abroad	44,000
	Less : (Gross National Income) G.N.I.	
(8)	Depreciation	2,000
(9)	Transfer income	2,000
(10)	Net National Income (NNI) at factor cost	40,000

AGGREGATE EXPENDITURE METHOD

The expenditure method estimates the national income with reference to the aggregate expenditure of the country on the consumption goods and investment goods in a given year. The total expenditure of the country can be estimated by adding up the total expenditure on consumption and investment by the individuals, firms and Government. The items to be included in the expenditure method are the following:

(i) **Total Expenditure on Consumer Goods and Services:** The expenditure on all types of consumer goods and services are to be included. We must also include the value of farm products retained for self consumption by farmers, the rental value of the owner-occupied houses and the value of free food and lodging provided to employees by employers.

(ii) **Total Expenditure on Capital Goods in the private Sector:** Real Investment Expenditure. This consists of expenditure on capital goods, inventories and the value of all additions made to the real physical assets in a country during the year. We get net investment in the private sector after deducting capital consumption from the gross real investment in the private sector.

(iii) **Government Consumption and Investment Expenditures:** The value of

goods and services purchased by a Government is also included. These consist of the payments made to the Government employees, interest paid on loans invested in the revenue-yielding assets and the value of goods and services purchased from private firms.

However, the depreciation of the Government capital assets as well as transfer expenditures incurred by a Government must be deducted.

(iv) **Net Factor Income from Abroad:** The net difference between the income received by the residents of a country from the rest-of-the world and the payments made by the residents of that country to the rest-of-the-world, must be included.

The following precautions must be taken while calculating the national income by expenditure method:

(a) Only the expenditures on the final goods must be included. Expenditure on the intermediate goods should be avoided, (b) Expenditure on old goods or financial investment must not be included, (c) To get the national income at factor cost, we must deduct indirect taxes and add subsidies for reasons already explained, (d) Care should also be taken to include the net factor income from abroad.

Uses or Usefulness or Utility of GNP Estimates:

The GNP statistics indicate a country's economic progress. The GNP is derived from agriculture, mining, manufacturing, transport, trade, services, etc. A study of the components of gross national output reveals the rate of economic growth. From the study of the trends in the outputs of various sectors, we can find out the importance of each sector and the progress made by different sectors in the economy. A study of GNP, distribution-wise, also indicates how it is distributed among individuals and social classes. Such information helps the Government to frame its fiscal and monetary policies. It is also useful for finding out inflationary and deflationary gaps as well as cyclical movements. Further, it is useful for adopting planning for economic development. Besides the per capita income figures are useful for comparing the economic welfare of a country over a period of time and of different countries at the same time, A study of the product components of GNP is also useful in wartime and for providing grants-in-aid to local Governments.

DIFFICULTIES IN CALCULATING NATIONAL INCOME

A number of difficulties are encountered in estimating the national income of any country. These difficulties can be of two types (1) Conceptual and (2) Statistical. In conceptual, the difficulty faced is to decide what items are to be included and what items are to be excluded in national income. In statistical, difficulty it is to decide what method of data collection is needed and how to verify what is calculated is correct or not.

Following are the common difficulties:

(1) **Inadequate and unreliable data:** Information available to the Government regarding income and expenditure is inadequate and unreliable. The income received by self-employed people may not disclose their real income. The data on agricultural output and the output of small-scale industries may not be reliable. Due to habit or illiteracy many people do not keep account of their income or expenditure. Many a times incomes are hidden and expenditures are exaggerated.

(2) **Possibility of double counting:** There are chances of calculating the value of both raw material and final goods. This is due to taking the value of intermediary goods, second hand goods, transaction of financial assets etc.

(3) **Unclear definition of National Income:** While calculating national income, only those goods and services which are paid for are included. The services which are not paid like the services of a housewife and other self services are normally not included. But if the above services are given to paid servants, they will be included in the calculation.

(4) **Presence of non monetized sector:** In underdeveloped or backward countries, a substantial part of the output is exchanged directly for other commodities. This is known as barter system. Such transactions may not be included in the national income. If they have to be included, it is difficult to calculate their value.

(5) **Production for self consumption:** A good part of the agricultural products in the underdeveloped countries will be kept for self consumption by the farmers. These goods do not come to the market. Hence their value may go unaccounted in the national income.

(6) **Instability in value of money:** National incomes are expressed in terms of money. But due to change in the prices, the value of money changes over a period of time. If the value of the measuring rod itself changes the calculation is difficult. Hence, the national income should be expressed both in terms of current prices and in terms of a base year price index.

(7) **Difficulty in calculating rental value:** The calculation of rental value of self-occupied houses and of public building is difficult.

(8) **Difficulty of calculating transfer income:** It may be difficult to estimate the exact amount of transfer income which people receive in the form of a gift.

(9) **Difficulty in the calculation of depreciation:** The calculation of depreciation on capital goods (estimation of capital consumption) is another serious problem. There are no acceptable standard methods of calculation of depreciation for different categories of capital items.

(10) **Lack of reliable classification of occupation:** It is very difficult to have proper classification of the occupations of the people. Besides the main occupation, people may engage themselves in subsidiary occupation. Hence, the calculation of national income according to occupation is difficult.

(11) **Valuation of inventory:** Inventory means the stock of finished and semi-finished products, the raw materials and the work in progress at the end of the financial year. It is very difficult to value their inventories by firms and enterprises.

(12) **Income from illegal activities:** It is rather difficult to find out the income generated by illegal activities like smuggling, illicit liquor making, and illegal currency printing.

(13) **Treatment of Government sector:** The Government expenditure on law and order, welfare and defence is included in the national income. Since their activities help the smooth functioning of the economic activities, should they are not be taken as intermediary goods.

(14) **Treatment of multinationals:** Multinational corporations have branches in different countries. The profit of their corporations which are actually

transferred to its parent company should be included in the national income of that country. The rest of the income should be taken in the national income of the country where the company is located.

(15) **International transactions :** The data about the aggregate receipts from and payments to the foreign countries may not be reliable.

INCOME AND EMPLOYMENT THEORIES

Macro variables such as national income, employment, saving, investment and aggregate consumption have great relevance to business decisions. The behaviour of macro variable constitute business environment which shapes and limit the growth of business in an economy. While formulating future business plans—future investment plan, business expansion and diversification—business managers must have working knowledge of the behaviour of the macro variables. The level of income and employment are determined by a number of factors. There are two important theories which attempt to explain the determination of the level of income and employment in an economy. National income is the sum of net value added at factor cost in the domestic territory of a country in an accounting and net factor income earned from abroad.

CLASSICAL THEORY OF EMPLOYMENT

According to classical theory of employment generally a capitalist economy is in equilibrium at the level of full employment. To classical economists full employment is a normal feature of a capitalist economy. If, at any time, there is not actually full employment, there is always a tendency towards full employment. However, if disturbances continue to exist in the long-run, these arc caused by the governments or Trade Unions interference in the free play of market forces. Therefore, under the conditions of laissez-faire, the market forces take care of full employment.

According to classical theory full employment means absence of involuntary unemployment. It means that all those who want to work at the existing wage rate get employment without any difficulty. Classicists accept that there can be frictional, voluntary and seasonal unemployment.

Determination of Output and Employment The classical theory of output and employment presents a model of full employment equilibrium wherein there is simultaneous equilibrium in the three markets, i.e., the labour market, product market

and money market. According to classical theory output and employment in an economy is determined by aggregate production function; and equilibrium between demand and supply of labour. Production function expresses the functional relationship between factors of production and volume of production. Given the stock of capital and technology the production function is:

Q=/(N) Where: Q = Volume of output

N = Level of employment Demand for Labour. The demand for labour is a function of real wages

W (DL=f(—). l he producer will make demand for labour up tolhat limit where

the marginal physical productivity (MPP) of labour becomes equal to real wage (W/P) when more and more labourers are employed, the MPP of labour goes on diminishing due to the application of law of diminishing returns. Therefore, the demand for labour will increase when real wage fall and vice-versa. It means demand for labour is a diminishing function of wage rate. Thus, demand curve for labour has a negative scope.

Supply of Labour. Supply of labour is also a function of real wage (W/P). It means there is positive relation between wage rate and supply of labour. Therefore, supply curve of labour slopes positively. Thus

SL = f (W/P) Where : W - money wages and P = price level.

The level of output and employment is determined by the intersection of demand curve and supply curve for labour. The equality between demand and supply of labour determine the level of employment which in trun determine the level of output. It is illustrated by fig. (a).

In fig. (a) DL is the demand curve for labour and SL is the supply curve of labour.

The aggregate production curve is shown in the upper part of fig. (a)

In the lower part of fig. (a) SL and DL intersect each other at E point. Point E is the equilibrium point of the economy and equilibrium level of employment is O N at W/P real wage rate. Point 'E' is the full employment equilibrium point because all get employment who want to work at (W/P) wage rate. If the real wage rate goes above the equilibrium wage rate (W/P), the supply of labour will exceed the demand for labour and there will be involuntary unemployment. Therefore, the wage rate will fall

and will come to (W/P) where all get work. On the contrary, if wage rate falls below the equilibrium wage rate, then there will be excess supply of labour. In this situation real wage will increase and will come to (W/P) where demand and supply of labour again come into equilibrium. Thus, it is clear that the economy is in equilibrium at E

FIG. A

point which is a full employment equiiibrium position. The determination of the volume of output is shown in the upper part of fig. (a). At full employment level O N the volume of output is O Q.

The equilibrium level of output and employment changes with shift in aggregate production function. Improvement in techniques of production, discovery of new resources and increase in the stock of capital shifts the production function upward. The upward shift in production function causes an increase in marginal productivity of labour. The demand curve for labour shifts upward. Therefore, the equilibrium level of employment and output will increase.

Explanation of Classical Theory of Employment The classical theory of employment is based upon two facts—(1) Say's Law of Market and (2) Flexibility of wage rate, prices and interest rates. According to Say's law of market— "Supply always creates its own demand." In the words of J.B. Say, "It is production which creates market for goods." It means that demand always increases in the same proportion in which supply increases. Each production injects equivalent purchasing power in the economy which ultimately leads to increase sales. According to classical economists saving means investment. Therefore, saving and investment are always equal. It saving and investment arc not equal then the flexibility of interest rate will restore equality between saving and investment. Thus, aggregate demand (OI) and aggregate supply (C+S) will always be equal. When supply always creates its own demand then there cannot be problem of general over production. Production can be increased upto the level of full employment because unemployed factors of production pay for themselves. Temporarily, there can be over production. But the free play of market forces would automatically restore equilibrium between demand and supply.

According to classical theory there cannot be involuntary unemployment if wages are flexible. It there is unemployment in an economy then money wage will fall. With the fall in money wages there will be a corresponding fall in real \rages. As a result of it,

the demand for labour will increase and full employment will be restored. It everyone accept wages equal to marginal revenue productivity, all involuntary unemployment would disappear. Prof Pigon argues that involuntary unemployment is due to the rigidity of wages due to government interference and interference of trade unions by way of their collective action. It these intervantions are stopped and economic system is allowed to function freely and wages are allowed to find their own level, unemployment would disappear and everone who is willing to work vili find a job.

Similarly, the flexibility in interest rate and prices of goods will restore equilibrium between saving and investment (S=l), and equilibrium between demand and supply of goods.

(Aggregate demand (MV) = Aggregate Supply (PT)

Criticism. Keynes criticised classical theory of employment on following grounds:

1. Possibility of Undcr-Employment Equilibrium. Keynes rejected the classical assumptions of full employment. Generally a capitalist economy is in equilibrium at less than full employment. This is because a capitalist economy does not work according to Say's Law of Market. Aggregate demand (AD) and aggregate supply (AS) can be equai at less than full employment. There are large number of people is an economy who are ready to work at the current wage rate, but they do not get job. Thus, the existence of involuntary unemployment proves that under employment in normal situation and full employment equilibrium is by chance. Great depression of 1930's proved the assumption of full employment inrealistic.

2. Weaknesses of Say's Law of Market. Classical theory is based upon Say's Law of Market. Keynes' success invalidates Say's Law through the concept of Marginal propensity to consume (MFC). M C is always less than one. Hence saving gap arises in the system. Rate of interest alone cannot bring equality between saving and investment. It savings are not automatically invested then aggregate demand (AD) falls short of aggregate supply (AS). This leads to general over production and general unemployment.

3. General Wage-cut cannot Increase Employment. Keynes criticised Pigou's contention that cut in money wages will lead to full employment with the fall in money wages, the income of the workers falls. The fall in workers income reduces the aggregate demand and fall in AD would result in more unemployment. In addition to

it, is a democratic country trade unions will oppose the general wage-cut. General wage-cut will create industrial interest in

the economy and thereby AD will fall due to fall in investment. Therefore, general wage-cut is not a practical proposition. Moreover, the real wages may not fall with fall in money wages.

4. Economic System is not Self-Adjusting. It is argued that a capitalist system is not automatic and self-adjusting because of the egalitarian structure of its society. Had the capitalist system been automatic and self-adjusting then great depression of 1930's would not have occurred. Due to market imperfection capitalist system is not automatic. Therefore government intervention is necessary to bring about equilibrium between demand and supply. In fact, state intervention reforms the capitalistic system and does not destroy it.

5. Saving and Investment are not interest Elastic. Classical theory hold good only if saving and investment are equal at the level of full employment. To classists the equality between saving and investment is brought by the flexibility of interest rale. Keynes criticised this contention. Keynes pointed out that saving depends upon the level of income, and investment is a function of rate of interest and marginal efficiency of capital. The mere change in rate of interest does not bring equality between saving and investment. The equality between S and I is brought about by change in income and not by change in interest alone.

6. Unrealistic assumption. Classical theory' assumes (/) perfect competition (//) perfect mobility of factors of production and (///) money is only a medium of exchange.

Imperfect competition rather than perfect competition prevails in the market. The factors of production are not perfectly mobile. Money i not merely a viel or medium of exchange. In other words money is not a passive and neutral factor. Infact money'supply affects economic activities. Money is a powerful variable which affect rate of interest, investment, production etc. Money serves as a store of value.

7. Ignored the Short-run Problems. The classical economists are of the view that self adjusting system tends to bring full employment in the long-run. There can be unemployment in the short-run. Thus, it concentrates on long-run problem. But to Keynes solution of short-run problem of unemployment is more important. He

asserted, "In the long-run we are all dead."

In the end it can be said that the Classical theory of employment committed the mistake of applying the conclusions of partial equilibriums to the entire economy. Therefore, it is not a general theory of income and employment.

KEYNESIAN THEORY OF INCOME AND EMPLOYMENT

Keynesian theory is based on short-run view. According to Kcynesian theory the level of national output depends on level of employment because capital, technology and labour efficiency remain constant in the short-runs. Therefore, national income can be increased by increasing the level of employment. Thus:

Y (National Income)=f(N) N = Employment Or N = f(Y)

According to Keynes' theory level of employment depends upon the level of 'Effective Demand'. The principle of Effective Demand (ED) is the logical starting point of Kcynes' theory of income and employment. To Keynes, unemployment is caused by deficiency of ED.

Effective demand is judged from the aggregate demand (AD), i.e., total expenditure on consumption goods and capita) goods in the entire economy. At various levels of income and employment, there are corresponding levels of AD (C+I), but all these levels of AD are not effective. Only that level of AD is effective which is fully met with the corresponding aggregate supply (AS = C+S). Thus ED is that level of AD which is equal to AS. There are two determinants of ED. These are:

(1) Aggregate Demand, and

(2) Aggregate Supply.

1. Aggregate Demand (AD). Aggregate demand refers to aggregate expenditure made by an economy on goods and services produced by all producers at a given level of employment. In other words AD means total sale proceeds that all the producers of an economy expect to receive from the sale of output produced by a given number of labourers.

Aggregate Demand Function or Schedule (ADF). AD is different at different levels of employment Aggregate demand function is a schedule which shows different levels of

AD at different levels of employment. When aggregate demand function is represented by a diagram then we get an aggregate demand function curve. Thus:

AD = f(N) and AD = (C+I)

2. Aggregate Supply (AS). The amount of goods and services all producers produce represent the aggregate supply' (AS). Wue of AS is equal to factor cost of production of goods and services. AS represents the cost of production. Thus, Aggregate supply is the total cost of output produced by all firms at a given volume of employment. In other words, AS refers to that minimum amount of money which all producers must receive by the sale of oulput produced at a given level of employment.

Aggregate Supply Function or Schedule. It is a schedule which represent the different levels of AS at different levels of employment and when this schedule is represented by a diagram, we get an aggregate supply function curve. Aggregate supply is different at different levels of employment. Thus, AS is a function of the level of employment.

AS = f(N)

Both AD and AS are increasing function of employment. Relative Importance of ASF and ADF

Kcyr.es gives little importance to ASF and concentrates move on ADF. In fact he assumes ASF to be given. Because Keynes theory is a short-run theory. In the short-run supply conditions cannot be changed. Moreover Keynes was primarily dealing with an economy facing cyclical unemployment and underemployment. Under such circumstances, there is little gain in manipulating technical condition of production such as cost, mechanisation, rationalization. If costs are reduced in a situation of unemployment, instead of increasing employment it shall increase unemployment. However, it does not mean that ASF is totally irrelevant. In inflationary situation when there is full employment, manipulation of ASF becomes inevitable. Thus, Keynes gave relatively more importance to ADF in his scheme of employment.

Aggregate demand depands on two factors — (1) Consumption (c) and (2) Investment (I). If employment is to be increased both consumption and investment should be increased. The consumption depends on propensity to consume or consumption function, i.e.

Of(x)

But propensity to consume is more or less stable in the short run. Thus consumption cannot be increased by increasing propensity to consume. Therefore, second determinant of AD, i.e., investment is more important. The investment be increased to increase AD and employment.

Investment depends an inducement to invest. It means investment depends upon — (a) Rate of interest and (6) Marginal efficiency of capital. According to Keynes rate of interest is determined by demand for money and supply of money. Demand for money depends on — (/) transaction motive, (//) precautionary motive and (///) speculative motive. Supply is determined by monetan authority, i.e. Central Bank of a country.

Marginal Efficiency of Capital (MEC). Marginal efficiency is the expected rate of profit on new investment and not the current rate of profit. The MEC is effected by business expectations. Two factors determine MEC — (1) Supply price of capital and (y) Prospective yields (PY). Supply price of capital means replacement cost of capital. Prospective yields of a capital asset is the aggregated net revenue expected from it during its life time. MEC is given by:

SP =

1 + '-) (l + r)2 '"" (l + r)M

Where: SP = Supply price, Y,Yj and Yn=prospective yields in different years, r = MEC

If MEO rate of interest, then investment will increase.

Keynes suggests that suitable monetary and fiscal policy be adopted to enhance the inducement to invest. Govt. should come forward to intervene in economic activities.

Determination of Level of Employment. The determination of level of employment is illustrated by fig. (a) draw below.

FIG. A

in fig. (a) ADF and ASF are aggregate demand and aggregate supply functions curves respectively. ADF and ASF intersect each other at point E. Point E is the point of Effective Demand' where equilibrium level of employment ON; is determined. At all points an ADF below E, expected receipts are greater than minimum receipts. For

example, at point H, expected receipts arc greater than minimum receipt by RH amount. Entrepreneurs find it profitable to increase production. As a result of increase in output employment increases from ONj to ON2 Where ADF = ASF. But at poiny 'C' expected receipts arc less than minimum receipt by BF amount. Here producer incurr loss. They do not find it profitable to provide employment to ONF workers, which is full employment level Therefore, employment level falls to ON3 level and it settles here. Thus, the economy is in equilibrium at E point. However, it should be noted that point E is not a point of full employment equilibrium. Thus according to Keynesian theory underemployment equilibrium is possible. If full employment is to be achieved, then ADF by increased by increasing investment cither by public investment or private investment or both,

Criticism of Keynesian Theory. Main criticism of Keynesian Theory are as under:

1. Docs not provide comprehensive solution of unemployment. Kcynes theory docs provide solution of all types of unemployment. It deals with only cyclical unemployment. Keyncs did not attempt to solve frictional, technological unemployment and chronic unemployment of under-developed countries. Keynes did not elaborate how to secure fair employment. A complete theory should explain how to get both full and fair employment.

2. Unrealistic Assumption of Perfect Competition. In real business world imperfect competition is found instead of perfect competition even in capitalist economics. Thcrerforc, it is not applicable in advanced economies.

3. No determinate functional relationship between Effective Demand and Employment. Critics point out that there cannot be a definite functional relationship between ED and employment. Keynes did not provide any evidence of this functional relationship. There is no direct relationship between ED and level of employment. In fact everything depends upon the complex interrelationship of wage rates, prices and money suppx

4. Wholly Aggregative in Nature. It is highly aggreative because it deals with aggregate concepts such as aggregate consumption, total investment and total output. These aggregate concepts may be misleading because these do not explain the economic problems of individual economic units like firm, industry and individual

consumption. It is not the size of investment alone that determines employment but the character of investment also affects production and employment.

5. Undue importance to inducement to invest Kcynes theory solely rely on investment to increase employment. Critiques point out that other determinants of employment were ignored by Keyncs.

6. Criticism of Consumption Function. Everybody knows that when income increase, consumption also increases. Thus, consumption function is a truism. Prof. Hazet criticises Keynes' consumption function on the basis that it is purely quantitative, but consumption.function has qualitative aspect as well. Prof. Hazet also points out that actual experience and empirical evidence do not support Keynes1 consumption function.

7. Keyncs ignores long-run problem. Keynes assumes that ASF is given. Thus, it is a short-run theory and provide solution to short-run employment problem. Keynes himself said, "In future we are all dead."

8. Keynes theory is not general. Keyncs theory' is not applicable anywhere and everywhere. Its application, as best, is limited to industrially advanced countries and it has little relevance to the problems of underdeveloped countries like India..

9. Keynes ignored accelerater effect. Accelerater and multiplier work simultaneously. Multiplier describes the effect of investment on consumption and the accelerater shows the effect of consumption on investment. But Keynes ignored the accelerater effect cbmpletely.

10. Liquidity Preference Theory of Interest is Indeterminate. This is an incomplete theory us it consider interest a purely monetary phenomenon. But rate of interest is not determined by monetary factor alone. Real factors also affect the rate of interest.

11. No Explanation of Partial Equlibrium. Keynes theory offers no solution to the problem of depression in an individual or particular industry.

12. Other. Mere cheap monetary policy may fall to stimulate business activities during depression. It provides no explanation of cost-push inflation. Moreover Keynesian economics is an economics of depression.

There may be weaknesses in Keyne^ian theory. However, it made a notable contribution to economics theory. Us prescription, have wider application to solve

practical economic problems. It is revolutionary theory and marks a sharp departure from classical thinking. Keynes theory provided tools of thinking which helped and may help to seek solutions to many economic problems.

INFLATION

The term 'inflation' is used in many senses and it is difficult to give a generally accepted precise and scientific definition of the term. Popularly, inflation refers to a rise in price level or fall in the value of money. Kemmerer states, "Inflation is too much money and deposit currency—that is too much currency in relation to the physical volume of business being done." This is what Coulburn also means when he defines inflation as : "Too much money chasing to few goods." That volume of money is responsible for the fall in the value of money or rise in prices is given expression to by several writers— "abnormal increase in the quantity of money" (T.E. Gregory), "the issue of too much money" (Hawtrey), etc. The implication in these definitions is that prices rise due to an increase in the volume of money as compared to the supply of goods. This is the quantity approach to the rise in the price level. But it should not be forgotten that the prices may rise due to other factors also—such as rise in wages and profits. Besides, there can be an inflationary pressure on prices without the prices actually rising.

Keynes mentions the following four related terms while discussing the concept of inflation:

(1) Reflations, (2) Inflation, (3) Disinflation and (4) Deflation.

Using a trade cycle model, we may clarify these terms as under:

(1) Reflation. It is a situation of rising prices, deliberately undertaken to relieve depression. With rising prices, employment, output and income also increase till the economy reaches the full employment ceiling.

Fig-. The Model of a Trade Cycle

In the above diagram, FF line represents the full employment ceiling and represents the normal path. In the beginning when the economy is at a point of below full employment equilibrium, an increase in money supply leads the economy to move on the path of AB. However, till the economy of employment and output. The situation is, thus, described as "semi-inflation" or "Reflation".

(2) Inflation. It occurs when prices rise after the stage of full employment in the economy, with no corresponding rise in employment and output.

The following are the main characteristics of inflation:

(a) Inflation is a long-term operating dynamic process.

(b) Inflation is a process of persistently rising price level.

(c) Inflation is fostered by the interaction of a multitude of economic factors.

(d) Inflation, in a real sense, is a post-full-employment phenomenon.

(e) A cyclical movement is not inflation. Inflation is rising trend in the price level.

(f) Inflation price rise is persistent and is irreversible within a short time; thus, it should be distinguished from a price rise which may occur temporarily, due to short-term scarcity or during a cyclical upswing.

(g) Inflation is indigenous to the economic system.

(h) By and large, inflation is also a monetary phenomenon. It is usually characterised by an overflow of money and credit. In fact, the root cause of inflation is the expansion of money supply beyond the normal absorbing capacity of the economy.

In Fig, 1, the economy's path up to BC is inflationary.

(3) Disinflation. When prices are falling due to anti-inflationary measures adopted by the authorities, with no corresponding decline in the existing level of employment, output and income, the result is "disinflation'.

When acute inflation afflicts the community, disinflation is adopted as a curve. Disinflation is said to take place when deliberate attempts are made to curtail expenditure of all sorts to lower prices and money incomes for the benefit of the community.

In Fig. 1, the path CD represents disinflation.

(4) Deflation. It is a condition of falling prices accompanied by a decreasing level of employment, output and income. Deflation is just the opposite of inflation. Deflation occurs when the total expenditure of the community is not equal to the existing prices. Consequently, the value of money goes up and prices fall. However, each and every

fall in price cannot be called deflation. For instance, when the inflationary spiral is controlled by an effective monetary and fiscal policy, along with increase output and employment, and prices begin to fall, it is not called deflation. The process of reversing inflation without either creating unemployment or reducing output is called "disinflation" and "deflation".

Deflation is an under-employment phenomenon.

In Fig. 1, the path DEG shows deflation.

Characteristics of Inflation

(1) It is a continuous rise in prices.

(2) Inflation is a long term operating dynamic process.

(3) Inflation is purely a monetary phenomena.

(4) It is not a high price but a rising price.

(5) Inflation is endogeneous to economic-System.

(6) A cyclical movement not inflation but continuity in price rise must be there.

(7) In real sense true inflation occures after full, employment.

(8) It is not cyclic process.

Types of Inflation

On different grounds, economists have classified inflation into various types. Some of the major categories are discussed here.

(I) Creeping, Walking, Running and Galloping Inflation

According to the rapidity with which prices increase, we have:

(i) Galloping Inflation. In case of hyperinflation, prices rise every moment, and there is no limit to the height to which prices might rise. Therefore, it is difficult to measure its magnitude, as prices rise by fits and starts. If, within a year, the prices rise by 100 per cent, it is a case of hyperinflation of galloping inflation.

(ii) Running Inflation. When the movement of price accelerates rapidly, running inflation emerges. Running inflation may record more than 100 per cent rise in prices over a decade. Thus, when prices rise by more than 10 per cent a year, running inflation occurs.

(iii) Walking Inflation. When the rise in prices becomes more pronounced as compared to a creeping inflation, there exists walking inflation in the economy. Roughly, when prices rise by more than ten per cent and within a range of 30 per cent to 40 per cent over a decade, or by 3 to 4 per cent a year, walking inflation is th^ outcome. Walking inflation presents a warning signal for the occurrence of running and galloping inflation.

(iv) Creeping Inflation. It is the mildest form of inflation. Keynesian economists do not consider this kind of inflation dangerous at all for the economy. When prices rise within a range to ten per cent over a decade or around about one per cent per annum, there occurs creeping inflation in the economy. Kent, for instance, opines that when prices rise by not more than three per cent a year, there is creeping inflation which does not disrupt the economic balance.

(II) Excessive, Cost Deficit and Flight Inflation

Discerning inflation, according to the factors which influence money supply and demand for goods and services, we have :

(i) Cost Inflation. When inflation emerges on account of a rise in factor cost, it is called cost inflation. It occurs when money incomes (wage rate, particularly) expand more than real productivity. Cost inflation has its course through the level of money cost of thq factors of production and in particular through the level of wages rates. Due to a rising cost of living index, workers demand higher wages, and higher wages in their turn increase the cost of production, which a producer generally meets by raising prices. This process of spiraling may reach higher and higher levels, in this case, however, cyclical anti-inflation remedies of monetary controls are not relatively effective.

(ii) Excessive money supply inflation. This is classical types of inflation, where there is an excess of money supply in relation to the availability of real goods and services. This type of inflation is usually conceived with reference to the cyclical fluctuations in the economy, and measures of monetary controls to check inflationary or deflationary trends.

(iii) Deficit Inflation. When the government budgets contain heavy deficit financing, though creating new money; the purchasing power in the community increases and prices rise. This may be referred to as deficit-induced inflation. During a planning era,

when 'government launches upon investment, it usually resorts to deficit financing, when adequate resources are not found. An inflationary spiral develops due to deficit financing, the production of consumption goods fails to keep pace with the increased money expenditure.

(iv) Flight Inflation. This types of inflation refers to the relationship between money supply and goods, where there is a flight from the currency, reflecting increased velocity of spending. This is the result of peoples' psychological reactions when they find an intolerable decline in the value of money. It has been said that this stage is always reached by recurring budget deficits, and then the creation of new money under deficit financing.

(Ill) War, Post-war and Peace-time Inflation

Under the criterion of time, we have:

(i) Peace-time Inflation. By this is meant the rise in prices during the normal period of peace. Peace-time inflation is often a result of increased government outlays on capital projects having a long gestation period; so a gap between money income and real wage goods develops. In a planning era, thus, when government's expenditure increases, prices may rise.

(ii) War-time Inflation. It is the outcome of certain exigencies of war, on account of increased government expenditure, which is of an unproductive nature. By such public expenditure, the government apportions a substantial production of goods and services out of total availability which causes a downward shift in the supply; as a result, an inflationary gap may develop.

(iii) Post-war Inflation. It is a legacy of war. In the immediate post-war period it is usually experienced. This may happen when the disposable income of the community increases when war-time taxation is withdrawn, or public debt is repaid in the post-war period.

(IV) Comprehensive and Sporadic Inflation

From the coverage or scope point of view, we have:

(i) Comprehensive Inflation. When prices of every commodity throughout the economy rise, it is called economy-wide or comprehensive inflation. It is a normal inflationary phenomenon and refers to the rising prices of the general price level.

(ii) Sporadic Inflation. This is a kind of sectional inflation. It consists of cases in which the averages of a group of prices rise because of increases in individual prices due to abnormal shortage of specific goods. When the supply of some goods becomes inelastic, at least temporarily, due to the physical or structural constraints, the sporadic inflation has its way. For instance, during drought conditions where there is failure of crops, foodgrain prices shoot up.

Sporadic inflation is a situation in which direct price control, if skilfully used, is most likely to be beneficial to the community at large.

(V) Open and Repressed Inflation

An inflation is open or repressed according to government's reaction to the prevalence of inflationary forces in the economy:

(i) Repressed Inflation. When the government interrupts a price rise, there is repressed or suppressed inflation. Thus, suppressed inflation refers to those conditions in which price increases are prevented at the present time through adoption of certain measures like price controls and rationing by the government, but they rise in future on the removal of such controls and rationing. The essential characteristic of repressed inflation, in contrast to open inflation, is that it seeks to prevent distribution through price rise under free market mechanism and substitutes instead a distribution system based on controls. Thus, the administration of controls is an important feature of suppressed inflation.

(ii) Open Inflation. When the government does not attempt to prevent a price rise, inflation is said to be open. Thus, inflation is open when prices rise without any interruption. In c/pen inflation, free market mechanism is permitted to fulfil its historic function of rationing the short supply of goods and distributes them according to consumer's ability to pay. Therefore, the essential characteristics of an open inflation lies in the operation of the price mechanism as the sole distributing agent The post-war hyper-inflation during the nineteenth twenties in Germany is a living example of open inflation.

However, many economists like Milton Friedman and G.N. Halm opine that if there has to be any inflation, it is better open than suppressed. Suppressed inflation is condemned as it breeds a number of evils like the phenomenon of black market, hierarchy of price controllers and rationing officers, and uneconomic diversion of

productive resources from the essential industries to the non-essentials or less essential goods industries since there is free price movement in the latter and hence more profitable to investors.

We may add to the above list, the following different kinds of inflation, based on various other causes.

(VI) Profit Inflation

In his recent book, Growthless Inflation by Means of Stockless Money, Professor Brahmananda mentions profit inflation as a unique category of inflation. The concept of profit inflation was originated by Keynes in his Treatise on Money. According to Keynes, the price level of consumption goods is a function of the investment exceeding savings. He considered the investment boom as a reflection of profit boom. Inflation is unjust in its distribution effect. It redistributes income in favour of profiteers and against the wage-earning class. During inflation, thus, the entrepreneur class may tend to expect an upward shifting of the marginal efficiency of capital (MEC); hence, entrepreneurs are induced to invest more even by borrowing at higher interest rates. Eventually, investment exceeds savings and economy tends to reach a higher level of money income equilibrium. In economy it is operating at full employment level or if there are bottlenecks of market imperfections, real output will not rise proportionately, so the imbalance between money income and real income is corrected through rising prices.

(VII) Foreign-Trade Induced Inflation

For an international economy, Prof. Brahmananda has categorised the following three types of inflation as being caused by factors pertaining to the balance of payments:

(1) Key-currency Inflation;

(2) Export-Boom Inflation; and

(3) Import Price-like Inflation.

When a country having a sizable export component in its foreign trade experiences a sudden rise in the demand for its exportables against the inelastic supply of exportables in the domestic market, it obviously implies an excessive pressure of demand which is revealed in terms of persistent inflation at home.

Again, trade gains and sudden influx of exchange remittances may lead to an increase

in monetary liabilities which is further reflected in the rising pressure of demand for domestic output causing an inflationary spiral to get further momentum. Such a permanent case for an export-boom inflation is, however, ruled out in the Indian economy, because neither export trade is a significant portion of Domestic National Product nor is there a continuous boom of export demand, causing terms of trade to move up favourable all the time.

CAUSES OF INFLATION

The general price theory states that a price rise may occur due to either of the following two situations:

(a) when the aggregate demand increases, and/or

(b) when the aggregate supply falls.

If there is an increase in aggregate demand, without any corresponding increase in supply or if there is a fall in supply without any fall in aggregate demand, the prices will go up. Thus, price-rise or inflation is caused by the two sets of causes viz:

(a) Causes which induce an increase in demand, and

(b) Causes which produce a fall in supply due to increase in costs.

Inflation caused by the first set of causes is called 'demand-pull inflation' while that caused by the second set of causes is known as 'cost-push inflation'

(A) Demand-Pull inflation

Demand pull inflation occurs when the aggregate demand increases without any increase in output. It means the prices will not go up if output increases along with the demand. If production is not increasing with the increase in demand, it is a state of mil employment and therefore, demand inflation occurs only when the production reaches at full employment level. Here,' demand is in excess of the available supply at the existing prices.

The following are some inflationary factors that induce demand of goods and services:

(1) Money Supply. Increase in money supply is the major factor that induces demand for goods and services. Increase in money supply increases, on the one hand, money

income of the people that can be spent in purchasing the goods on the other hand, increases bank deposits which are the basis of the expansion of credit. The policies of central and commercial banks are also responsible for expansion of credit money. For example, a slash in the bank rate makes the credit cheaper. Expansion of actual money and credit money increases the demand for loans for production purposes Increased supply of money and bank credit adds something to the demand of goods and services, on the one hand, and to the cost due to interest element on the other hand. These factors push up the prices.

(2) Raising the Velocity of Money. Velocity of money pertinently goes up during boom period. It happens when people stop preferring liquid money and their consumption function dominates the saving attitude. People prefer to spending on consumption which brings an increase in the velocity of money and thus gives a spurt to prices.

(3) Disposable Income. Disposable income refers to the income payments to various production factors after personal taxes have been paid. An increase in the disposable income results in an increase in the absolute amount of consumption expenditure in the economy that boosts up prices.

(4) Deficit Financing. Deficit financing is a technique through which the government covers the budgetary gap. When the government spends more than what it expects to collect as revenue, the deficit is met by issuing more currency in the market or by borrowing the funds from foreign governments or international agencies. It will result in more money in the market and will increase in the price level because the disposable income of countrymen increases.

(5) Increased Foreign Demand. Increased foriegn demand will naturally push the prices of the domestic goods and services because it increases the overall demand. This factor is particularly significant if country's balance of trade is favourable or exports are higher than imports.

(6) Increase in Business Outlays. Increase in business outlays, or capital expansion, takes on a speculative characters during an inflationary boom. Most of the new equipment and plants are financed by speculative borrowing, not to mention an increase in their replacement demand. Most of the expenditure of the business find

way into income stream via dividend wages, interest and other income payments. These income payment are also inflationary in character.

(7) Increase in Population. If the population of a country-rises rapidly, it will pressurise the demand of goods and services. If money supply does not increase, the velocity of money will consequently increase the prices provided the increase in output is less than proportionate to increase in demand due to increased population. In this regard Prof. Coulbom says, "If population increases rapidly, while the aggregate of money remains stable, the consequent rise in the velocity of circulation is likely to outweigh the countervailing decrease in the volume of money per head; further a rapid increase of population may increase output less than proportinately, another factor tending to raise prices."

The cumulative effect of all these factors is that the aggregate demand function in an economy shifts upward, resulting in an inflationary rise in prices.

(B) Cost-Push Inflation

The second major cause of inflation is the increase in the cost of production. When cost of production increases, the supply curve will go downward, provided there is no increase in demand at the prevailing prices. Thus increase in cost of production, decreases the supply resulting in upward trend in price level.

The following factors responsible for the increase in cost and consequently resulting in higher prices are:

(I) Higher Wage Rates. Strong trade unions, very often demand for higher wages for their members and successfully manage to get it because the enterpreneurs have no other choice. This increase in wages is not linked with the increased productivity and hence the cost of production goes up. The producers shift this increased burden on the consumers by charging higher prices for their commodities. This is a never ending wage price spiral. Higher prices of goods amounts to higher cost of living and a fall in real wages. To neutralise the fall in real wages, again higher wages are demanded and granted which again are passed on to the consumers and thus inflationary trend continues.

(2) Fall in the Supply of Basic Inputs. Whenever basic and strategic raw materials and other input like iron and steel, cement, cotton etc. go in short supply, their prices will tend to move upward. The cost of production of finished goods in which such raw

materials are used, increases thereby and consequently their selling prices, thus, would be a sources of cost push inflation.

(3) Higher Profit Marginals. Another factor causing cost push inflation is higher profit margins fixed by the producers. It is especially possible in monopolistic or near-monopolistic market situations where the producers (or heading producers) fix up higher profit margins arbitrarily without any increase in other elements of cost. If some powerful producers succeed in revising their profit margins upward, the other followers-producers also increase their profit margins and this phenomenon would push up the prices because profit becomes the part of selling price. Thus higher profit margins inflate the price level.

(4) Higher Taxes. Another source of cost-push inflation is higher tax especially indirect tax like sales tax, excise duties etc. imposed by the government. Such taxes increase the selling prices of the commodities because producers generally shift the burden of such taxes to consumers. Thus higher indirect taxes push the commodity prices in the market.

(5) Administered Higher Prices of Inputs. Sometimes, the prices of a number of important inputs are administered by the government or by supplying agency or organisation. Such administrators of prices keep on revising the prices of controlled juts at regular or irregular intervals. The revised prices are generally fixed upward. Higher prices of inputs raise not only the prices of outputs in which they are used but they raise the general price level as basic inputs are used as basic raw materials in a number of industries. For example, prices of crude oil are administered by the Organisation of Petroleum Exporting Countries (OPEC) which keeps on revising the prices of crude oil upward from time to time. As oil is a basic input for a number of industries, it raises the general price level and therefore establishes a powerful cost push inflationary forces in the economy.

J$) Natural Factors. Fall in agricultural production owing to Insufficient or excessive rainfall, and other natural calamities like earthquakes, floods, drought conditions, famine and other destructive mishappenings moves the prices of agricultural consumer goods upward. In addition to that, industrial production is also affected as the supply of inputs falls short. Both these factors exert inflationary pressures.

v^C?) Low Industrial Production. Various causes tend to affect the industrial production negatively resulting in the short supply of consumer goods. Such factors are strikes and lock outs, nonavailability of factors of production, break down of power supply, operation of law of diminishing return, etc. Fall in supply will naturally increase the prices.

(8) Government Policies. Various policies of the government also help raising the general price level in the country. For example wage policy fixing the wages of workers working in specified industries; industrial policy, not allowing certain industries to be in operation without license or providing excessive protection to industries; export policy, making export of certain commodities obligatory, thus leaving the domestic demand unsatisfied etc., affect the supply position of industrial production unfavourably and price trend shows an upward move.

The cumulative effect of all the above factors sets in cost-push inflation in the economy.

Demand pull and cost push inflation in an economy go together and no demarcation line can be drawn between the two. Both affects each other. In both the cases demand exceeds supply and prices of factor inputs rise.

EFFECTS OR CONSEQUENCES OF INFLATION

Inflation has its multifold effects on different sections of the society and on the economic activities. Some effects are good and some others are quite undesirable for the economic development of the country and to different sections of the society. Modem economists are of the view that a mild degree of inflation is not only desirable but also a necessary condition for growth specially in developing countries where manpower and natural resources are underutilised. A slow rise in prices may induce the investors to undertake innovations and expand the level and scale of production. But, it is desirable only as long as it is kept within control table limits and is not allowed to gallop further. Galloping inflation, certainly, has same serious consequences. The Consequences of inflation can be discussed under two subheads:

(A) Effects on Production or on Economic Activities

As we explained in the above lines that a mild inflation serves as a tonic for the

economy of the country and therefore, is a necessary condition for the growth of the economy. A mild degree of inflation has some good effects:

With an increase in the price level, the profit margins of producers lead to widen. Rise in price level also increases, the costs of inputs but the prices of inputs move slowly, as compared to the prices of the final products. The producers thus, have a wider profit margins. It encourages more investments in industries because investments in industries shall be more attractive due to greater profit margins. It will lead to industrial progress of the country as new and new industrial units will be promoted by the industrialists to earn more profits. The industrial expansion boosts up the employment level. Expansion of industrial base requires the employment of more and more labour and thus unemployed manpower and resources are utilised.

But this favourable trend continues so long as the prices are rising at a slow speed and the state of foil employment is not achieved. But as soon as the full employment point is achieved, it becomes self-generating and creates uncertainty in the economic system. It degenerates into runway inflation or hyper inflation. This situation is not desirable for investment and production activity and has the following adverse effects on the productive activities of the economy:

(i) The hyper inflation results in the fall of money value that discourages savings on the part of general public. With the reduced savings, capital accumulation suffers a serious set back, because of the increasing propensity to consume, rather than to save something for future.

(ii) Reduced capital accumulation shall effect the investment in productive activities adversely that will consequently hamper the industrial production in the country.

(iii) As inflation creates uncertainty in the economic activities, the production will be affected adversely on this account. The enterpreneurs will be discouraged from taking business risks in production.

(iv) Runaway inflation also affects the pattern of production as the rise in general price level disturbs the price relationship. The prices of some commodities go up rapidly, while of some others; move rather slowly and of some, remain stationary or may even fall. There is, therefore, a diversion of resources from production of some to others mainly from the essential goods industries (which are low profit generation) to

luxury goods industries (which are more profit-prone industries). This results in further shortage of essential consumer goods to the common man, pushing the prices upward.

(v) Inflation gives stimulus to speculative activities on account of the uncertainty generated by continually rising price level. In order to earn more profits, businessmen prefer to engage in speculative activities rather than to invest money in productive activities.

(vi) Inflation disrupts the smooth functioning of the price mechanism, thereby creating all round confusion in the economy. Artificial demands and supplies take place, disturbing the forces of demand and supply.

(vii) The worst effect of hyper-inflation is that, in course of time, it results in a flight from domestic currency on account of its constant diminishing value. The people lose confidence in their home currency and rush to buy foreign currencies of stabler value to safeguard their interest.

Thus, on production side, mild degree of inflation, gives encouragement to produce more till the stage of foil employment but later on, production activites are discouraged.

(B) Effect on Society or on Distribution

A prolonged period of persistent inflation results in redistribution of income and wealth. Inflation does not effect all sections of society alike. Some gain from inflation while some others lose. These 'gains' and 'losses' results in redistributing the income and wealth within the society. The effects of inflation on different sections of society may be discussed as under:

(i) Debtors and Creditors. When inflation sets in debtors as an economic group tends to Again. During inflation, the value of money falls sharply but the debtor has to repay the same amount of money he had borrowed few years hence. In this way, he returns less purchasing power to the creditor than what he actually borrowed. Creditors, on the other hand, are losers during inflation because they receive lesser purchasing power than what they had actually lent.

(ii) Wage and Salary Earners. Wage and salary earners generally lose during inflation. Although their wages and salaries also go up in the wake of rising prices but wages

and salaries generally do not rise in the same proportion in which the price level or their cost of living rises. Thus the real value of their fixed income falls and they are badly hit during inflation.

(iii) Producers or Businessmen. Producers or businessmen gain during inflation as the prices of their stock suddenly go up. It is a tonic for the businessmen and producers. Though, the cost of production also goes up but prices rise at a faster rate than the cost of production and thus, it results in higher profits.

(iv) Investors. We can distinguish two types of investors:

(a) investors in equities (equity shares), and

(b) investors in fixed interest-yielding securities like bonds and debentures. Inflation bestows favours on the former and is rather harsh on the latter. In case of former type of investors, equity dividends increase as a result of increasing corporate profit during inflation, On the other hand latter types of investors get fixed dividend (on preference shares) or interest on bonds and debentures. Inflation erodes the value of such dividend and interest with the rising prices. Therefore, their interests are adversely affected.

The small middle class investors generally keep their savings in fixed deposits in commercial banks or in their provident fund accounts maintained by their employers through insurance covers. The value of their savings fall sharply on maturity and therefore, household savings during inflation get discouraged. People prefer to spend more of its income in purchasing consumption goods and therefore, their will and ability to save are affected seriously. It badly hit the process of capital formulation, in the absence of which rapid industrial development cannot be expected.

(v) Farmers. Farmers gain during inflation. Like other producers, farmers gain because of the time lag involved in the purchase of inputs and sale of output. Moreover, the prices of farm products go up while the costs incurred by them do not go up to the same extent. Again, farmers are generally debtors and as debtor, they are to pay less purchasing power during inflation.

To conclude, we say that inflation redistributes income and wealth but it increases disparity of income and wealth in the society.

It penalises consumers, labours, creditors, small investors, and fixed income group while it rewards businessmen, debtors and farmers.

CONTROL OF INFLATION

Inflation is harmful to the economic development and to the various sections of seciety and, therefore, should be contained. There are three lines of action that can be adopted to check inflation namely:

(1) Monetary measures,

(2) Fiscal measures, and

(3) Other measures,

(1) Monetary Measures. Monetary measures are those measures of the government which aim at regulating the money supply in an economy. Such measures directly hit the inflationary boom. As Central Bank is the sole authority to control the money supply, this step is, therefore, taken by the Central Bank of the country. Money supply, at any time, consists of currency and bank-credit. Bank credit creates a proportinately larger share of money supply in an economy. Therefore, the bent of monetary authority is to regulate the flow of bank credit. The following monetary measures are popular curbing inflationary pressures:

(a) Bank-Rate Policy. Bank rate is a rate at which Central Bank of the country accepts and lends money to the commercial banks. This rate affects the bank-credit issued by the commercial banks to businessmen. An increase in bank rate, certainly, makes the bank-credit dearer because lending rate of interest is increased accordingly. It will discourage borrowing by businessmen from banks, resulting in a fall in the intensity of inflationary measures in the the economy.

Again, increased interest rate, consequent upon the increase in bank rate, will attract savings and induce people to save more rather than to spend money on consumer goods.

The measure will, reduce the supply of bank-credit and currency.

(b) Increased Re-discount Rates. To curb inflation, die Central Bank generally increases the re-discount rates. An increase in the rediscount rates leads to an increase

in bank rates, because there is definite relationship between the two. An increase in bank rates tends to discourage borrowing by businessmen from banks, resulting in a fall in the intensity of inflationary pressures in the economy. An increase in interest-rates consequent upon the increase in the bank rate will make savings attractive than before and induce people to spend less on consumer goods. But the increase in re-discount rates as a weapon to check an inflationary boom has its limitations too. Firstly, if the bank rates do not rise pan passu with the rise in rediscount rates, there will be no decline in business borrowings, and hence, the inflationary pressures will continue, even though the rediscount rates have been raised. Secondly, the effectiveness of higher re-discount rates as an anti-inflationary weapon shall be considerably undermined if the commercial banks have an easy access to additional reserves.

/fc) Sale of Government Securities in the Open Market. Another method to check the inflationary boom is to resort to sale off government securities to the public by the Central Bank. As the buying public purchase and pay for those government securities, the commercial banks, reserves with the Central Bank are correspondingly reduced and they are obliged to adopt a restrictionist credit policy in relation to business requirements. But the sale of government securities as an anti-inflationary weapon is also subject to limitations. Firstly, this policy may be rendered ineffective if the commercial banks are able to increase their reserves by selling their stocks of government securities to the Central Bank. Secondly, this policy may also be offset by increased borrowing from or by increased sales of treasury bills to the Central Bank of the commercial banks.

(d) Higher Reserve Requirements. An increase in reserve requirements of the member banks also serves as an anti-inflationary weapon during inflation. It absorbs the excess reserves of the banking system and, thus, prevents them from forming a basis for further credit expansion. But this method is also subject to limitations.

Firstly, if the commercial banks happen to have very large excess reserves, even the raising of the reserve requirements may not significantly curtail their power to create credit. Secondly, the ability of commercial banks to increase the reserves through sale of government securities may render higher reserve requirements ineffective to check credit expansion.

Higher Margin Requirements. It is a method of selective credit control. The Central Bank in its pursuance of an anti-inflationary policy may raise the margin requirements of loans to higher levels. The higher the margin requirements, the lower the amount of loan that the borrower can obtain from the bank. Thus, higher margin requirements have the effect of checking undue monetary expansion.

^AO Consumer Credit Control. During an inflationary boom, facilities for instalment buying are reduced to the minimum to curtail excessive spending on the part of the consumers. This is done (i) by raising the minimum initial payments on specified goods, (ii) by extending the application of consumer credit control to a large number of consumer goods, and (in) by reducing the length of the payment period, etc.

(2) Fiscal Measures. The major anti-inflationary fiscal measures are the following:

(affiovernment Expenditure. To counteract increased private spending at a time of inflation, the government should, at such a time, reduce its own expenditure to the minimum extent possible to help limit the aggregate demand. As against this, it may, however, be said that it is not so easy to reduce government expenditure particularly during the war period. Secondly, any drastic cut in government expenditure to cure inflation may actually land the economy in a slump.

—ffirublic Borrowing. The object of public borrowing is to take away from the public excess purchasing power which, if left free, would surely exert an upward pressure on the price-level in view of the limited supplies of goods and services in the economy. If voluntary borrowing does not yield adequate results, it may become necessary to resort to compulsory borrowing from the public.

(c) Debt Management The existing public debt should be managed in such a manner as to reduce the existing money supply and prevent further credit expansion. Anti-inflationary debt management usually requires the repayments of bank held debt out of a budgetary surplus. The idea is that the government securities held by commercial banks should be retired by the government out of the budgetary surplus. This would check the power of commercial banks to encash their securities and add to the reserve^ for the purpose of credit expansion.

The problem during inflation is to reduce the size of disposable income in the hands of the general public in view of the limited supply of goods and services in the

market. It is, therefore, necessary to take away the excess purchasing power from the public in the form of taxes. The rates of existing taxes should be steeply increased, while new taxes should be imposed on commodities so as to leave less money supply with the public to spend.

A Suitable Income Policy. At a time of inflation, the government must also adopt a suitable price-income policy. It should strictly control wages, salaries and profits to keep spending at a low level to fight inflation.

(f) Over-valuation. An over-valuation of domestic currency in of foreign currencies will also serve as an anti-inflationary measures. Firstly, it will discourage exports and thereby increase the availability of goods in the domestic market Secondly, by encouraging imports from abroad, it will add to the domestic supply of goods in the economy. But over-valuation as an anti-inflationary weapon suffers from several limitations.

(3) Other Measures. These measures can be used to supplement monetary and fiscal measures undertaken to contain inflationary pressures:

(a) Expansion of Output Increased production is the best antidote to inflation because inflation arises partly due to inadequacy of output. But it becomes rather difficult to increase output at a time of inflation because of the full utilization of resources. It is suggested that if it is not possible to increase output as a whole, steps should be taken to increase the ouput of those goods which seem to be extremely sensitive to inflationary pressures by shifting productive resources from the less inflation-sensitive goods. In other words, a re-allocation of productive resources is suggested to step up the output of inflation-sensitive goods, such as, food, clothing, housing, etc. Steps may also be taken to increase supply of consumer goods through large-scale imports from other countries to absorb excess money supply.

(b) Price Control and Rationing. The object of price control is to lay down the upper limit beyond which the price of a particular commodity would not be allowed to rise. To ensure the successful functioning of price control two condtions will have to be satisfied. Firstly, the government should have under its control adequate stocks of the commodities concerned. Secondly, the demand for the concerned commodites should be controlled through rationing, failing which the richer sections shall be able

to buy a major portion of the available stocks.

(c) Wage Policy. During an inflationary boom, the wages have to be controlled so as to curb the inflationary pressures in the economy. Wage increases may be allowed to workers only if their productivity increases. If this principle is observed, higher wages shall not lead to higher unit costs and, hence, to higher units prices.

Thus, the above steps taken simultaneously, may improve the situation a lot.

DEMAND PULL INFLATION

he most common cause for inflation is the pressure of ever rising demand on a stagnant or less rapidily increasing supply of goods and services. The expansion in aggregate demand may be the result of rapidly increasing private investment and/or expanding government expenditure for war or for economic development. At a time when demand is expanding, and is exerting pressure on prices, attempt may also be made to expand production. But this may not be possible either because unemployed resources are not available or because shortages of transport, power, capital and equipment, etc., may prevent output from increasing in proportion to expanding demand and inflationary situation in the country. Expansion in aggregate demand, after the level of fiill employment, will push up only the short period, resources are used for growth and for creating fixed assets and for the production of consumer goods. Necessarily, large expenditure will create large money income and large demand but without a corresponding increase in supply of real output.

According to the demand-pull theory, prices rise in response to an excess of aggregate demand over existing supply of goods and services. The demand-pull theorists point out that inflation might be caused, in the first place, by an increase in the quantity of money, when the economy is operating at full employment level. As the quantity of money increases, the rate of inflation will fall and, consequently investment will increase. This increased investment expenditure will soon increase the income of the various factors of production. As a result, aggregate consumption expenditure will increase leading to an effective increase in the effective demand. With the economy already operating at the level of full employment, this will immediately raise prices, and inflationary forces may emerge. Thus, when the general monetary demand rises faster than the general supply, it pulls up prices. Demand pull inflation, therefore,

manifests itself when there is active cooperation, or passive collusion, or a failure to take counteracting measures by monetary authorities. Demand-pull or just demand inflation may be denned as a situation where the total monetary demand persistently exceeds total supply of real goods and services at current prices so that prices are pulled upwards by the continuous upward shift of the aggregate demand function. By using the aggregate demand and supply curves, in Fig. 2, the demand-pull process can be graphically illustrated.

In Fig. 2, the X-axis measures real output, and the Y-axis measures the price level. Curves D, D, and 02 represent the aggregate supply function, which slopes upward from left to right and, at point F it becomes a vertical straight line. The point F suggests that the economy has reached a level of full employment. Hence, die real output tends to be fixed or inelastic at this point. Assuming that the D cruve intersects the S curve at point F, the real output or income is at full employment and the price level is OP. When there are increase in the aggregate demand function beyond D, either due to an increase in autonomous investment (I), or because of an increase in the propensity to consume (C) or government spending (G), represented by a shift in the aggregate demand curve, such as D, D2, the supply to total real output being inelastic, the price level tends to rise from P to P, and then to P2.

MONETARY POLICY

Monetary policy is basically concerned with the monetary system of the country. It deals with monetary decisions and measures and such non-monetary decisions and measures as have monetary effects.

Monetary policy is usually defined as the central bank's policy pertaining to the control of the availability, cost and use of money and credit with the help of monetary measures in order to achieve specific goals.

The central bank of a country is the traditional agent which formulates and operates monetary policy.

A monetary policy is regarded as passive when the central bank's decision to abstain deliberately from applying monetary measures and active when it seeks to achieve, certain ends through the enforcement of positive monetary measures.

Monetary policy is only a means to an end, not an end in itself. The aims, objects and scope of monetary policy are conditioned both severally and collectively by the

economic environment and philosophy of time. In a broad sense, however, monetary policy itself cannot be ordained to operate, on its own, as a foolproof controlling measure but rather in conjunction with the fiscal policy and debt management. In fact, monetary/policy, fiscal policy and debt management may be lumped together as a national financial policy.

Traditionally, credit control measures and decisions are she instituting elements of a monetary policy. Monetary and credit policies operate on the following interrelated factors:

(i) the availability of credit and its flow.

(ii) the cost of borrowing, that is, the rate of interest;

(iii) the general liquidity of the economy; and

(iv) the volume of money.

A sound monetary policy is the main prerequisite of a successful and comprehensive programme of development planning. A proper monetary policy is, however, not a sufficient condition but a necessary one for economic growth, because economic growth is basically a real phenomenon and not a monetary phenomenon. Indeed, Money has a dynamic role to play, because it activises idle resources and the spending of money leads to its allocation. A well-structured monetary policy can direct its efficient allocation.

In the economically advanced countries, the monetary authority concentrates on the regulatory aspect of monetary measures in order to achieve the goal of economic stabilization, while in a developing economy like India, monetary policy tends to be typical in nature claiming at controlled expansion. The policy of controlled expansion contains the attempt at reconciliation of two contradictory motives: (i) to facilitate economic growth; and (ii) to restrain inflationary pressures:

OBJECTIVE OF MONETARY POLICY

Monetary policy, in essence is the economic policy of the government in the monetary field. Thus, the objectives of monetary policy must be regarded as being part of the overall economic objectives to be pursued by the government. Indeed, the objectives of a monetary policy can be manifold in the context of the general economic policy of a country. But the various objectives of monetary policy are not always mutually

consistent. The monetary authority of a country has to select, on the basis of priority assigned alternative ends, when they are incompatible with, or conflict with, one another. Thus, the monetary authority should possess a clear idea of the range of choice among its various ends in the prevailing economic condition and the general economic aims of the country. The traditional objectives of monetary policy prior to World War II were commonly considered to be the maintenance of price stability and exchange stability. The Radcliffe Committee, however, suggested the following objectives of monetary policy to be followed by a modem government of a developed country which are identical with those of the general economic policy:

1. A high and stable level of employment.
2. Steady economic growth and a high and growing level of income and the improvement in the nation's standards of living.
3. A margin in the balance of payments in order to contribute something to the economic development of the outside world.
4. Reasonable price stability to maintain the internal value of money intact.
5. A stable exchange rate and strengthening of foreign exchange reserves.

The prime objectives of monetary policy, however, changed from time to time in relation to exigencies of circumstances and economic consideration. The generally accepted important goals of monetary policy can be enumerated as :

(1) neutrality of money;

(2) exchange stability and equilibrium in the balance of payments;

(3) price stability and control of business cycles;

(4) full employment; and (5) economic growth.

(1) Neutrality of Money

The neutral monetary policy was expounded by Prof. Hayek. According to him, the monetary authority should aim at the complete neutraility of money. He holds that money should be a passive factor. It should not be allowed to interfere with the economic forces like productives efficiency, real cost of production and consumer preferences. The purpose of money is just to facilitate exchange transactions without

creating any disturbances in the functioning of economy. Hence, the quantity of money should be so controlled as to result in the total output, total transactions and prices of goods and services being exactly what they would be in an efficient barter economy.

The policy of neutral money seeks to do away with the disturbing effects of the changes in the quantity of money on important economic entities such as prices, output, employment and income.

Thus, under the policy of neutral money, the monetary authority has to keep the quantity of money perfectly stable. It should be noted, however, that the perfect stability of money for the neutrality goal implies that the quantity of money is to be kept constant at all items and in all circumstances, for cyclical fluctuations in an economy are primarily caused by changes in the supply of money.

Firstly, it is pointed out that the concept, which is based on the quantity theory of money according to which changes in the money supply cause corresponding changes in the price level, is an outmoded concept, and, therefore, has been discarded by economists.

Secondly, a neutral money policy will not ensure stability in the price level, for in a modem economy, technological and scientific developments play a vital role in increasing production and if, under such conditions, quantity of money is kept fixed, it would only lead to deflationary conditions, and hence to a fall in prices.

Thirdly, some critics point out that the concept of neutral money and the purpose for which it is aimed at are not only contradictory to each other but impracticable as well. In fact, the concept, being based on the laissez faire philosophy in which perfect competition in a really free economy is assumed, has long been considered obsolete in a modem dynamic economy. Further, to ensure stability in a modem economy, it is essential for the monetary authority to maintain an effective supply of money. Apparently effective monetary control by the central bank and the laissez faire policy can never go together.

Finally, the above concept does not apply to cases of depression when prices are falling even though money supply remains unchanged and volume of goods and services decline. In a depressionary period, even when the quantity of money is increased in the economy, it cannot revive the price levels.

In conclusion, it may be affirmed that a neutral money policy cannot check the occurrence of business fluctuations in an economy and that money has come to stay as an active element in a modern economy.

(2) Exchange Rate Stability

Maintenance of stable exchange rates is an essential condition for the creation of international confidence and promotion of smooth international trade on the largest scale possible. Instability in exchange rates might lead to undesirable effects such as weakening of the value of currency in the world market, speculation and even flight of capital abroad.

The objectives of exchange stability of a monetary policy could easily achieve an equilibrium in the balance of payments of a country under the gold standard. Traditionally, countries faced with balance of payments problems have used monetary policy as a means of eliminating their deficits.

A restrictive monetary policy tends to reduce a country's balance of payments deficit in the following ways:

(i) Under dear money policy, higher interest rates make it less attractive for foreign countries to borrow from the deficit country and induce them to invest there.

(ii) It tends to reduce demand in the country, which in turn tends to reduce the demand for imports as well as for domestic goods.

(iii) Reduction in domestic demands holds down the rate of inflation or reduces prices which makes imported articles less attractive and makes; the deficit country's exports more attractive to foreigners. Thus, import is curtailed and export expanded.

Though a policy of stabilisation of exchange rates was justified in the interest of maintaining stable international economic relations, the exchange stability goal of monetary policy has been criticised in the following grounds:

(i) Exchange stability can be achieved only at the cost internal price stability. But fluctuations in the domestic price level or changes in the purchasing power of money causes severe disturbances in the economy of a country. This may call for internal prices stability which is of prime importance for the smooth functioning and progress of the domestic economy.

(ii) Since inflationary or deflationary movements in some countries are passed on to some others through fixed exchange rates, it puts the affected country at the mercy of other countries. This may serious affect the economy of the country whose prosperity does not depend upon foreign trade.

(3) Price Stabilisation

Fluctuations in prices and cyclical variations are the chief among other disadvantages of a monetary system under capitalism. The object of monetary policy apparently to reduce these disadvantages to a minimum. Thus, in the view of economists like Cassel and Keynes, a more important aim of monetary policy is to achieve and maintain price stabilisation and normal course of business activity through appropriate credit regulation measures adopted by the central bank.

A price stabilisation policy is advocated on the following grounds;

(1) Inflation is unjust and ruins the general economic welfare of the community.

(2) Price stability creates difficult problems of production and distribution, affecting differently different sections of the community. In short, there are innumerable evil aspects of inflation (rising prices) or deflation (falling prices).

(3) Deflationary price level breeds increasing unemployment and falling level of output and income. It ultimately leads to depression, and is, therefore, inexpedient.

(4) Briefly, the changes in the price level cause disturbances in economic relationships within a country as well as among countries. This may produce dire economic and social consequences to all concerned. Only a policy of price stabilisation will eliminate such disturbances.

(5) A fine stabilisation of internal prices is essential to augment community's economic welfare.

(6) The policy of stabilisation will eliminate cyclic fluctuations, since for the purpose of maintaining price stability, undue credit expansion or contraction (which are generally supposed to accentuate a

boom or slump) will have to be controlled.

(7) Active and stable prosperity is possible only during periods of relatively stable prices. When the value of money is reasonably stable, there will be greater confidence in the forward contracts and credit transactions and this promotes business activity. Mo.iey as a store of value and a standard of deferred payments can function very well only in periods of price stability.

(8) Equitable distribution of national income is ensured by price stability.

Apparently, the goal of price stabilisation implies that in general the average price level as measured by the wholesale price index or consumers' price index should not be allowed to vary beyond narrow margins.

Generally, a policy of price stabilisation is objectional on a number of grounds as listed below:

(1) The concept of price stabilisation being vague, it is difficult to determine the price level to be selected for stabilisation.

(2) Price changes are a symptom rather than a cause of cyclical fluctuations. The price level itself does not offer any preventive or remedial measure and, therefore, price stability as the criterion of monetary policy cannot be accepted as a suitable aim.

(3) Price stabilisation may hinder economic progress, as it will remove much of the price incentives to the business community and as such productive activity will suffer from stagnation.

(4) A policy of price stabilisation ignores the dispersion of individual/prices which together constitute the "average price level" The structure of prices in general and individual prices in particular rather than the general price level as such are important in triggering economic activity in the system.

Variations in prices are useful for the successful working of the price mechanism for economic adjustments in a free enterprise economy.

(5) Stability of prices in the face of declining costs adversely affects

economic relations and functioning:

(a) It may prove to be inflationary and encourage overinvestment and over-expansion that must lead to their subsequent collapse.

(b) It permits debtors to appropriate the benefits of gain in economic efficiency at the expense of creditors;

(c) It prevents the sharing in the benefits of economic improvements by people of fixed income groups like salaries employees and pensioners.

(6) Price stabilisation policy is not a very feasible phenomenon. A central bank cannot effectively control the volume of credit in the economy as a whole, because a large chunk of financial activities is carried out through non-banking financial intermediaries and thus, outside the control of the central bank. Moreover, during a deflationary period, expansion of money supply may fail to bring prices to the original level.

(7) Economic history reveals that economic stabilisation can never be guaranteed by mere price stabilisation, as there can be disharmonies and dislocations in the economic system even though prices are stable in a free economy.

Alternatively, there may be the policy of rising price level or falling price level.

The Policy of Slowly Rising Prices or Mild Inflation

Against rigid price stabilisation, some economists have advocated a policy of gently rising prices on the following counts:

(1)It may safeguard against the risk of deflation, when a rising price level is favoured by the monetary authority by adopting cheap money policy as an anti-deflationary measure and a policy of economic development via inflation.

(2) It will prevent underemployment and depression. It gives continuous'stimulation to the business community to invest and expand which will assure continuous economic progress with a high level of employment and prosperity.

(3) Rising prices distribute income in favour of profiteer's class whose marginal propensity to save is very high and thereby the rate of saving can be

enhanced for capital formation and other productive activity. This is especially advocated for an under-developed country with a capital deficiency.

(4) It has been argued by some economists that rising prices stimulate not only production, but consumption also. The policy of rising price level is regarded as a policy of stimulating consumption and raising the level of effective demand by inducing consumers, producers, wholesalers and retailers to buy the stock of goods in anticipation of further rises in prices. Thus, a rising prices policy, it is assumed, not only ensures an increase of output but secures a market for the larger output, without which over-production is liable to occur.

(5) To most economists, however, the most important motive of the policy of rising prices is the desire to stimulate production. Thus, prosperous periods are usually assumed to be accompanied by rising prices, while depressions are accompanied by falling prices. Prosperity can be achieved; it is assumed, through the stimulating effect of the rise in prices caused by monetary expansion. Thus, rising prices are favoured because they mean the prospect of higher turnover, higher profits and lower risks. A rising price level is indeed a very powerful stimulus to trade.

The above mentioned points can well be summarised by quoting Prof. Samuelson, thus: "In mild inflation the wheels of industry are initially well lubricated, and output in near capacity. Private investment is brisk, jobs plentiful. Such has been the historical pattern."

Drawbacks of a Slowly Rising Prices Policy

The rising prices policy is subject to the following disadvantages:

(1) It tends to discourage aggregate saving and encourage extravagance on the part of both consumers and producers.

(2) It may lead to an over-expansion which may ultimately lead to crisis and collapse. In view of rising prices, the producers are not very much induced to bring down their costs of production. When there is a seller's market during inflation, producers are able to sell almost anything they produce. Under such circumstances, quality may become a Secondary consideration. However, producers are liable to make mistakes in their judgment of the market demand, but amidst rising prices, such mistakes may only mean a slower turnover and smaller profits.

(3) In spite of its business stimulating effect, a policy of rising prices could hardly be expected to provide the economic millennium. Inflation, however good it may look in the beginning, ultimately brings chaos and distractions in the economy. It encourages speculation and easy money-making activities through hoarding, black-marketing, etc. Inflation may also displace rational judgement of the entrepreneur by provoking speculation which may lead to over-expansion in investment followed by an inevitable collapse."

Policy of Slowly Falling Prices

Some economists, however, have advocated a policy of slowly falling prices for the following reasons:

(1) In contrast to rising prices, which reward speculative businessmen and protect the inefficient from the penalties of their errors, falling prices require high grade managerial performance and efficiency for business survival. This, is a very desirable result from the point of view of public welfare.

(2) Falling prices policy is better than a stable price policy in an advancing economy in the sense that it saves the society from the inflationary effect which would have been caused under price stability. It is a policy which allows a lower cost of production caused by technological progress to produce its effect on prices and avoid an inflationary bias.

(3) When prices do not fall so very rapidly, as to unduly depress business activity, the distribution of income will be improved under such a policy because of the increased share being enjoyed by the wage-earning and consumer classes.

(4) A falling prices policy is very desirable to check a speculative boom and to enforce the liquidation of unsound ventures that had developed under the influence of prolonged inflation.

(5) A great merit of a falling prices policy is that it complies with consumers' clamour for returning to the 'good old days' of low prices.

(6) From the standpoint of foreign trade, falling prices policy will stimulate exports and discourage imports and make the balance of payments position favourable.

Stabilisation of prices has its merits and drawbacks, whereas inflation and

deflation are not unmixed blessings. In a dynamic world, it is impracticable to strike a happy medium between inflation and deflation. Thus, the best solution seems to be that a changing trend in prices .from time to time as the circum stances call for with a reasonable level of stability should be the aim of monetary policy. In other-words,.under undesirable galloping inflationary conditions, a falling prices policy may be adopted as an anti-inflationary measure, '.while "in an inexpedient deflationary situation, a rising prices policy may be followed with the aim of restoring prices to their previous level. This is how a reasonable (but not absolute) degree of price stability may be attained.

(4) Full Employment

Since the publication of Keynes's General Theory, most economists considered full employment as the foremost and ideal objectives of monetass policy. Thus, the use of monetary policy for promoting full employment is of recent origin. According to many modern economists, economic stabilisation can be conbined with the objective of having a high or full level of employment.

According to Growther that the obvious objective of a monetary policy of a country should be the attain equilibrium between saving and investment at the point of full employment. According to Dueserberry, however, monetary policy is one of a set of instruments which can be used in achieving the full employment goal. The appropriate use of anyone instrument of policy depends on the manner in which the other polices are followed. To him, the main task of monetary policy is to find a level of interest rates which exactly equates investment demand with full employment saving. As a matter of fact, some particular rate of investment is required to achieve full employment. This can be illustrated diagrammatically as in Fig. 1.

Fig. I: Rate of Investment required for full employment

In the above diagram, the line C + G shows the consumption plus government expenditure at any level of income resulting from a particular combination of government expenditure and taxes under a given fiscal policy. Thus, the task of monetary polky is to produce an investment demand which makes the C + G + 1 line pass through a point a above FE, i.e., full employment point. The distance bd is the potential full employment saving of the economy. Hence, monetary policy is to put that amount of money supply in circulation which may produce a level of interest

rates which exactly equates investment demand with full employment saving. This can be shown diagrammatical ly as in Fig. 2

Fig. 2: Determination of money supply required for a full employment rate of investment.

In Fig. 2 the vertical line S shows, full employment savings in (a) shows the level of invtstment associated with differen clevels of interest rates out of full employment increases

OR is the ideal interest rate at which investment becomes equal to saving at full employment equilibrium level of income. In panef (b) the LP curve represents liquidity preference at the demand for money at this full employment level of income. In relation to this demand for money, OM amount of money supply is necessary to achieve the OR rate of interest, which is suitable to induce investment required for full employment, and the full employment saving and investment level will be equated at such a rate. Thus, ON, the optimum money supply is to be released by the monetary authority for the sake of full employment.

(5) Economic Growth

While economic growth is unquestionably a primary goal of any economy, there is heated controversy in regard to qualifications as an objective of monetary policy. Till now amajority of economists considered monetary policy asa short-run policy primarily aimed at full employment and mitigating cyclical fluctuations and not concerned with economic growth as such. Recently, however, it has been realised by many that it is not enough to achieve full employment but that the economy should develop at an ever-growing pace if people have to be provided with a high standard of living.

According to Woodworm, there are two principal reasons why economic growth deserves a high priority: (1) Despite the amazingly improved living standard in the western world during the put two centuries, poverty .remains the world's burning economic problem; and (2) Growth is an essential ingredient of free economic and political institutions. Thus, a majority of economists are agreed on the point that monetary policy should explicitly adopt economic growth as its objective.

Monetary policy can contribute to the achievement of economic growth in qvo ways:

(1) The monetary authority can help economic development by creating a favourable environment for saving and investment which greatly influences economic growth. For this, the monetary policy's aim of price stabilisation is very important. Reasonable price stability encourages both saving and investment. As saving is the main source of capital formation, when saving increases under favourable circumstances, capital formation can also be accelerated which in turn accelerates economic growth.

(2) It is sometimes argued that a tight or restrictive money policy impedes while an expansionist or easy money policy promotes economic growth. But as a matter of fact, neither view is true, since the truth lies somewhere midway. A tight money policy is not conducive to growth only when it is applied at a wrong time, say when there is deficient demand. In a situation with deficient demand and unemployed resources to a large extent, an easy money policy is most suitable, but if it is carried far beyond the stage of full employment, it will generate an inflationary impact, and to control a speculative boom in such a situation, a tight money policy will be appropriate. Thus, the important thing is that they should be applied at the appropriate time; otherwise, they do more harm than good to economic growth. Therefore, a flexible monetary policy has been advocated to achieve economic growth with price stability. Briefly, thus, monetary policy can assist in promoting economic growth by maintaining reasonable price stability and optimum use of economic resources in an economy.

In brief, monetary policy is necessarily concerned with all the major objectives of economic policy, namely, price stability, exchange and economic stability, full employment, economic growth etc. Since these objectives to some extent are in conflict, therefore monetary authorities are always confronted with the problem of priorities.

ROLE AND OBJECTIVES OF MONETARY POLICY

The various objectives of monetary policy are interrelated. They also usually conflict with one another. Thus the objective of price stability may conflict with the objective of exchange rate stability. Also the attainment of full employment may conflict with the goal of price stability and so on. Now we shall discuss two following sets of

conflicting objectives.

(1) Exchange Stability vs Price Stability. These are the two contradictory goals of monetary policy. It is difficult to pursue together. Some economists favour exchange stability at the cost of price stability and others favour price stability. The best course is that a mid-way solution harmonising both objectives should be aimed at. Then, the question may arise whether it is possible to do so, or whether the two objectives, price stability and exchange stability, are really compatible with each other.

Of course, the above two objectives are contradictory under the gold standard. According to the rule of the gold standard, stability of exchange rates alone should be aimed at and no parallel efforts be made to stabilise the domestic price level. A monetary policy aiming at both will miserably fail in its mission and would achieve nothing. However, under certain conditions, these two objectives may be found quite consistent and compatible. For instance, the monetary authority can work for both if its gold reserves are sufficiently large to maintain exchange stability, continuing to export gold and not to have a resource to credit contractions consequent upon such outflow of gold. In such cases, domestic price and economic stability as well as exchange stability can be ensured.

Secondly, it may be pointed out that both the objectives can be harmonised when the policy adopted by the monetary authority for maintaining stable exchange rates also coincides with the policy of price stabilisation. For instance, if there is an outflow of gold, a contraction of credit is to be initiated according to the rules of the gold standard, which may however also become necessary, at the same time, if the economy has been operating at full employment level and internal prices have been rising. Similarly, an expansionist money policy may be conducive to both exchange stability and price stability when there is an influx of gold in the country and there is need of credit expansion to stimulate investment, employment and prices in the economy. Such a coincidence, however, is rarely observed.

In reality, the interpretation of the broad principles and objectives of monetary policy varies from country to country and the result is a disequilibrium which calls for a disharmony between the two accepted objectives, viz. price stability and exchange stability. In the present era, however, exchange stability is assigned secondary importance as compared to internal price stability because modern states have

accepted the prime duty of welfare maximisation and a reasonable exchange flexibility is permissible under the ambit of control of the International Monetary Fund of which most of the countries are members. In fine, today, the goals of full employment and economic growth have assumed superiority over the stability goal and hence, the object of a monetary policy is to follow a price policy corresponding to the needs of the country concerned in view of its growth and employment policy.

(2) Full Employment and Economic Growth. The objectives of full employment and economic growth should be distinguished from each other. The following are the important points of distinction between the two objectives:

(i) Full employment is a static notion. It refers to the full utilisation of existing capacity of the economy with given productive resources, technology and production methods. Economic growth, on the other hand, is a dynamic concept. It implies an enhancement of productive resources through technological advancement, exploitation of new fields, new territories, new methods etc. It involves uplifting the country's production-possibility frontier as a whole.

(ii) Full employment implies exploitation of job opportunities by lifting the actual production frontier up to its maximum limits under the constraint of available resources. While economic growth means creation of more employment opportunities by raising the potentialities of production frontier by developing additional resources.

(iii) In technical jargon, the full employment objective implies raising the actual output schedule of a country to its production possibility frontier with a reasonable degree of economic stability. The economic growth objective, however, implies raising the production possibility frontier itself, together with the actual output schedule. It involves structural changes. This is what Whittlesey wants to convey when he says that "the ideal output under full employment objective is the country's economic potential at the prevailing level of technology, while under the economic growth objective, it is the countries" economic potential at a progressive level of technology and specially at a level which progresses in an ideal manner.

(iv) Full employment objective is relatively a short span phenomenon. It aims at economic stabilisation through the elimination of cyclical fluctuations that are faced by an advanced capitalist economy. Economic growth, on the other hand, is a long-term objective of monetary policy. Its aim is to improve the standard of living of

the people, to remove poverty by increasing the level of income, output and employment in the economy. This objective is largely adopted by governments of underdeveloped countries. However, there is no reason why an advanced economy should not adopt it.

(v) Full employment objective puts stress on the maintenance of effective demand; thus, during a depression it implies correcting the deficiency of demand and when there is inflation due to excess demand, it implies curbing it.. The objective of economic growth, however, stresses on increasing the volume of the complementary resources essential for securing the productive employment of available labour rather than on the maintenance of effective demand as such.

Sometimes, rising prices of inflation, it is suggested, serves the goals of both full employment and economic growth. However, inflation may tend to hinder economic growth if the to capacity. This is because:

(a) It encourages the production of consumption goods rather than capital goods, as prices of consumption goods rise faster than those of capital goods during an inflationary period. However, economic growth is pre-conditioned by the increase in capital goods as' such.

(b) Inflation makes for inefficiency and reduces the incentive to make the best possible use of available productive resources.

(c) Moreover, when deflationary measures are taken to curb excessive inflation during the course of full employment, it tends to discourage long-range planning in industry which is again detrimental to economic growth.

(d) If may cause industrial disharmony and indiscipline which gives rise to frequent strikes and lockouts mat may hinder growth considerably.

In short, the policy of price stability at full employment level pursued by the monetary authority is not conductive to the growth objective as such. Thus, a monetary policy serving wholeheartedly the immediate ends of full employment is liable to become entirely unsuitable from the standpoint of growth objective. However, to the extent that a reasonable price and economic stability of full employment objective is conducive to growth, it can easily be regarded as a part of the growth objective, and there can be no conflict between the two objectives and their measures. In fact, the adoption of the growth objective does not mean that

monetary policy should disregard reasonable price and economic stabilisation as such.

To sum up, the concepts of full employment and economic growth are all together different and the former is more suitable to the advanced countries at underemployment equilibrium while the latter is most suited to the newly developing nations and countries suffering from long-run stagnation.

SCOPE OF MONETARY POLICY IN UNDERDEVELOPED COUNTRIES

The scope of monetary policy in underdeveloped countries is extremely limited, compared to that in advanced countries for the following reasons:

(1) The money market is unorganised in an underdeveloped country, and therefore the monetary management of the central bank cannot be perfect.

(2) Changes in bank rate or other monetary instruments are proved to be ineffective in underdeveloped countries also on account of the existence of a vast non-monetised sector in their economies.

(3) In most of the underdeveloped nations, money supply-primarily consists of currency in circulation while bank deposits form relatively a small proportion of it. Lack of banking habits on the part of the people in poor countries makes it difficult for the monetary authority to influence the economy by controlling the banking system.

The above stated factors impose a limit on the scope of monetary policy in underdeveloped countries. However, this does not mean that monetary policy has no role to play at all. Despite its various limitations, the monetary policy in an underdeveloped country can greatly assist economic growth "by influencing the supply and use of credit, combating inflation and maintaining the balance of payments of equilibrium."

Monetary policy and management have an active role to play in a scheme of planning for economic development in an underdeveloped country. It would have to take on a direct and active role firstly, in increasing or helping to create the machinery needed for financing developmental activities allover the country, and secondly, in ensuring that the finance available flows in the direction intended. Briefly, thus, the monetary policy in an underdeveloped economy has to be used to activises the growth process

and to create favourable conditions for fostering economic development with reasonable stability.

EFFICACY OF MONETARY POLICY

It is generally conceived that monetary policy is more effective in checking economic activity than in stimulating it. In other words, monetary policy is more effective in checking boom conditions than in generating recovery from recession or depression. In times of depression or stagnation, the monetary authority can do very little. It cannot enforce investment merely by following an easy money policy or credit expansion as such. It can control the money rate of interest to some extent but not the rate of profit which may be a very low or even in a negative quantity during a depression. Investment generally seems to be interest inelastic. The interest-inelasticity of investment can be explained on two counts: (I) interest represents a minor element of total costs in short-term investments, and (2) in making long-term investments, business expectations and other economic variables are far more important than the influence of interest rates. Thus, when there is overall pessimism prevailing in the economy and the marginal efficiency of capital is very low, mere monetary expansion by the monetary authority cannot do anything substantial. Moreover, there is no direct relationship between the quantity of money and the price level as was traditionally assumed. There are many other factors affecting prices and business activity as powerfully as the money supply. Most of them being non-monetary in nature, cannot be controlled by monetary action alone. Depression needs action to revive effective demand by raising the consumption and marginal efficiency of capital through public investment programs and such other measures. Hence, fiscal policy was advocated as a powerful weapon for offsetting and checking depression and unemployment. Only in times of prosperity can monetary policy be used effectively, as it can control speculative boom and inflation by regulating undue credit expansion. Thus, it seems that monetary policy is admirably suited to situations requiring the restraint of inflationary pressures of requiring high short-term interest rates to lessen the flow of capital for reducing a deficit in the balance of payments.

In formulating an effective monetary policy, the following two points should be borne in mind:

(i) the magnitudinal dimension, and (ii) the time dimension.

The strength of the effectiveness of the monetary policy is measured by its magnitudinal dimension; while the lag involved in its effectiveness is measured by the time dimension of the policy.

Again, the strength of monetary policy is determined by the elasticity as well as the degree of stability of functional relations-affect the flow of bank credit in the economy. Modern monetarists, however, feel that this is not enough. The central bank must aim at influencing the total volume of liquidity rather than the quantity of money alone to bring forth effective results. It has been contended that the fundamental object of monetary action of the central bank is to change the level of aggregate demand by influencing the community's rate and volume of spending.

However, the crucial factor determining the people's spending is the general liquidity of the entire economy rather than the cash and credit balances possessed by them. Cash and credit balances constitute a part of the wider structure of liquidity in an economy, hi reality, the financial assets created by the financial intermediaries and other agencies of the money market constitute the rest (the large part) of the general liquidity in a modem economy. In a modern community, thus, the decision to spend does not depend simply on the cash and credit balances held by the people, but to a large extent on the potential liquidity constituted by the possible alternative of raising funds either by selling an asset held or by borrowing.

FISCAL POLICY

The term, fiscal policy, embraces the tax and expenditure policies of the government. According to Arthus Smithies, Fiscal policy is a "policy under which the government uses its expenditure and revenue programmes to produce desirable effects and avoid undesirable, effects on the national income, production and employment." Fiscal policy in short refers to the budgetary policy.

Broadly speaking, the taxation policy of the government relates to the programme of curbing private spending. Expenditure policy deals with the channels by which government resources are pumped into the private economy. Government spending on new goods and services directly adds to aggregate demand and indirectly increases income through secondary spending which takes place on account of the multiplier

effect. Taxation, on the other hand, operates in reducing the level of private spending by reducing the disposable income and the resulting savings in the community. Hence, under the budgetary, phenomenon, public expenditure and revenue can be combined in various ways to achieve a desired stimulating or deflationary effect on aggregate demand.

Fiscal policy has a quantitative as well as a qualitative as well as a qualitative aspect. Changes in tax rates, the structure of taxation, and its incidence, -influence the volume and direction of private spending in the economy. Similary, changes in government's expenditure and its structure of allocation will also have quantitative and redistributive effects on income, consumption and aggregate demand of the community. As a matter of fact, all government spending is an inducement to increase the aggregate demand and has an inflationary bias in the sense that it releases funds for the private economy which are then available for use in the course of trade and business. Similarly, a reduction in government spending has a deflationary bias and it reduces the aggregate demand. Thus, the composition of public expenditure and composition of public revenue not only help to mould the economic structure of the country, but may also be expected to exert certain effects on the economy at certain times and a quite different impact at other times.

It was Keynes who popularised the interest in fiscal policy as a measure attaining macro economic goals like increasing the level of employment and income in an economy. Prior to Keynes, the classical economists believed in the principle of sound finance in which small and balanced budget was considered to be the ideal one. Keynes, for the first time, stressed the need to of State intervention in the economic field and advocated for an unbalanced budget. In fact, modern fiscal policy is by and large an application of the principles of functional finance. It has been recognised that budgetary measures carry significant influences on the functioning of the economy and therefore, modern public finance is regarded as functional finance.

BALANCED BUDGET APPROACH

According to the classical economists, however, fiscal policy should have the minimum range of operations and the budget should be balanced annually. They firmly stuck to the doctrine of lassez faire and Say's law of markets. According to Adam Smith, economic equilibrium and progress are attained through inherent and

self-oriented endogenous forces of the economic system. In classical opinion, thus, when full employment is supposed to reach automatically, productivity of government services in the economic field is nil. And since government services are rendered at the cost of the national product, it amounts to a cut in the aggregate national product. Thus, when government's productivity is zero in a free enterprise economy, it is desirable that government confines itself only to its primary functions of protection and security of life and property and does not interfere with the free working of the economic system. Even if government efforts are productive, it cannot increase national income and level of economic activity above the level reached without its intervention. Thus, when full employment, optimal allocation of resources and equitable distribution can be achieved automatically through the operation of free economic forces, fiscal operations have to be of a non-regulatory, non-interfering nature. As such, the smallest budget was considered to be the best in the classical era. As such, classicists firmly advocated a balanced budget, in the sense that current annual revenue and expenses of the government must be equal. It, thus, does not provide for borrowings. The balanced budget principle was thus recognised as a principle of sound finance in orthodox economics.

Under the theory of sound finance, classicists favoured a balanced budget criterion for the following reasons:

(i) Unbalanced budgets may generate inflation on account of large and unproductive public expenditure.

(ii) If the budget is unbalanced, the government has to borrow. The government's market borrowings cause reduction in loanable funds available to private productive employment and investment activities.

(iii) Unbalanced budgets imply a wide extension of state functions beyond the capacity of the government, which may invite irresponsible governmental action.

(iv) A balanced budget, on the other hand, is a limited budget designed in a rational way.

(v) A series of unbalanced budgets imply an increase in the burden of public debt.

(vi) Economic stability is secyired by the adoption of a balanced budget

policy. Unbalanced budgets, on the other hand, cause economic uncertainty and promote instability.

Furthermore, when the public debts mature, the government will have to impose additional taxes to obtain resources for their repayment. Thus, additional taxation would again tend to have an adverse effect on the incentive to work and save. It would also cause the accentuation of income distribution. Moreover, government borrowings cause the rate of interest in the money market to rise, as the demand for loanable funds rises. A rise in the rate of interest adversely affects investment activity in the private sector.

In short, according to the principles of sound finance, a budget must be balanced annually and the gap between revenue and expenditure should be minimum. Thus, classical economists firmly advocated a laisser-faire policy and were confident of the unhampered optimum operations of the free enterprise economic system. Neoclassical economists, however realised the socially undesirable effects of unregulated free enterprise on the economic system. It was argued by them that careful state action for raising income and public spending was essential to attain maximum social welfare under the concept to welfare state developed in the neo-classical era.

UNBALANCED BUDGET APPROACH

Keynesian revolution in economic thinking reconstituted the whole basis of public finance and affirmed functional finance as a fiscal norm in modem times. Though the lead in the development of "functional finance" concept was taken by Keynes, credit goes to Prof. A.P. Lerner for coining this concept. Lerner puts that: "The principle of judging fiscal measures by the way they work or function in the economy, we may call "functional finance". He contends that the fiscal operation of the government—taxing, borrowing, public spending, management of public debt, etc., deficit financing, etc.—should be designed with the objective of fulfilling certain functions which have an immediate bearing and far-reaching effects on the economic system as a whole. In economic philosophy, the term "functional finance" embraces public expenditure, public revenue and debt management which are regarded as fiscal instruments effectively used to achieve objectives like attainment and maintenance of full employment with economic stability.

As Prof. Chelliah points out, the functional concept of fiscal policy, thus, implies that: (i) the fiscal operations of government should be conducted on a functional basis, and public finance should not be considered as being induced solely by the need for securing social goods meant for collective consumption, and (ii) the budget need not always be balanced. As a matter of fact, the fiscal norm of functional finance is the complete antithesis of the orthodox rule of balanced budget. The functional finance norm suggests the formation of large budgets with a wider functional coverage of government spending to promote basic economic goals, e.g. (a) to obtain optimal allocation and efficient use of scarce resources at full-employment level, (b) to achieve economic stability and bring about an equitable distribution of income and wealth in the best possible manner.

Quite contrary to the classical notion, the concept of functional fiscal policy suggest that the state need not and should not assume a passive role in the economic affairs of the country. It implies that public spending may be incurred not merely for the sake of its direct benefits, but for the sake of indirect effect it produces in raising the level of income, output employment; and the public revenue may be raised not to meet an anticipated expenditure, but to curtail excessive demand and curb inflationary potentials in the economy. Taxation is, thus, regarded as an important and effective weapon in the hands of government to promote economic progress with stability.

Lemer suggest the following rules for government's responsibility and activity under functional finance:

(i) The government should incur public debt by borrowing money from the private sector only during inflation when it is absolutely essential to mop up the excessive purchasing power from the public, thereby reducing the pressure of excess monetary demand.

(ii) The government budget should be directed towards the achievement of full employment and price stability. For this purpose, the government budget need not necessarily be balanced.

(iii) During depression only, public expenditure in excess of current public revenue may be met by deficit financing, i.e. printing additional currency notes.

In short the main tenet of functional finance is the formation of unbalanced budget from time to time for perfecting the countercyclical goal of fiscal policy. A

surplus budget is recommended during inflation and a deficit budget for recovery through excessive public spending during a deflation or depression.

Functional finance, thus, deliberately aims at unbalancing the budgets with a view to attaining and maintaining full employment level in a developed economy, hi an underdeveloped economy, however, the main problem is not one of full employment but that of rapid economic growth. In a developing economy, thus, the functional aspect of fiscal policy is to be conceived in the context of a planned process of economic development.

OBJECTIVES OF FISCAL POLICY

Fiscal policy, in modern era, subscribes to the following major macro economic goals:

(a) Full employment.

(b) Economic stabilisation.

(c) Economic growth.

(d) Social justice or equality in the distribution of income and wealth.

(a) Fiscal Policy for Full Employment. Keynes regarded public finance as compensatory finance ordained to attain and maintain full employment in the economy. To pursue this goal, Keynes suggested that:

(i) Taxation should be devised to promote and sustain consumption and investment.

(ii) Public expenditure has to be compensatory one. It has to be in a planned way to finance public works programmes and provide social security measures.

(iii) Public borrowings should be on a large scale to finance productive public expenditure.

(iv) To raise the level of effective demand and to overcome depressionary forces, budget should be in deficit and it should have deficit financing.

(v) Direct taxes should be lowered to encourage savings and investments directed towards creation of more employment opportunities.

(vi) Public expenditure should be meant for uplifting the level of aggregate demand, investment and employment.

Once full employment level is reached, it has to be constantly maintained by adopting appropriate fiscal measures from time to time.

(b) Fiscal Policy and Economic Stabilisation. Economic stability is another prime aim of a sound fiscal policy. This goal implies maintenance of full employment with relative price stabilisation. Price stability hence means relative price stability. Inflation should be curbed and deflation should be avoided. In short, economic growth and stability are the twin objectives jointly pursued by a developing country's fiscal policy. The forces stimulating growth process should be given a boost at a time while inflationary pressures are to be curbed.

(c) Fiscal Policy and Economic Growth. Poor countries are entangled in the vicious circle of poverty. It should be broken. Thus, rapid economic growth is the fundamental objectives of fiscal policy in a developing economy.

Fiscal policy as a means of encouraging growth process has the following objectives:

1. To realise and mobilise potential resources into the productive channels. For this fiscal policy should aim at improving marginal propensity to save and the consequent increment saving ratio. The following methods have been suggested by Prof. Tripathy for raising the incremental saving ratio:

(i) Increase in the rates of taxation, (ii) Public debt. (iii) Imposition of additional taxes. (iv) Direct physical control, (v) Revenue of public enterprises. (vi) Deficit financing.

2. To induce and stimulate private sector investment.

3. To promote investment into socially desirable channels.

4. To accelerate the rate of economic growth. In this regard, fiscal measure must be conducive to growth process. In no way should fiscal means adversely affect the ability and willingness to work hard, save more and invest.

5. To alter the pattern of investment and production in such a way as to improve the general economic welfare and sustain egalitarian goals like equity in distribution and eradication of poverty.

(d) Fiscal Policy and Social Justice. A welfare state should provide social justice by giving equitable distribution of income and wealth. Fiscal policy can serve as an effective means of achieving this much desired goal of socialism in developed as well as developing countries. Progressive tax system can be of much use in realising this objective. Moreover, public expenditure helps in redistributing income from the rich to the poor section of the society.

Thus, fiscal policy insists that in a budget, growing allocation should be made for programmes like free medical care, free education, subsidised housing, subsidised essential commodities like milk, etc.

FISCAL POLICY AND UNDERDEVELOPED ECONOMY

The nature of fiscal policy in an underdeveloped economy is bound to be different from that of a devloped country. In a developed economy, the problem is not so much that of achieving economic stability on account of business fluctuations caused by the trade cycle. The compensatory fiscal policy is eminently suited to achieve a high degree of economic stabilization in a developed economy. But the problem in an underdeveloped economy is not so much that of economic instability as that of promoting rapid economic growth in the country. The fiscal policy, as such, must not only be that of compensatory spending as in a developed economy, but also one capable of promoting rapid economic growth in the country. The following could be the major objectives of fiscal policy in an underdeveloped country:

(i) The first objective of fiscal policy in an underdevelped country should be to maximize the level of aggregate saving by applying a cut to the actual and potential consumption of the public at large.

(ii) The second objective of fiscal policy should be to divert capital resources from less productive to more productive, and from socially less desirable to socially more desirable uses. This objective is implicit in planned economic development.

(iii) The third objective should be to maximize the rate of capital formation to break down economic stagnation and to lead the country on the path of rapid economic progress.

(iv) The forth objective of fiscal policy should be to protect the economy of an

underdeveloped country from the demon of inflation. It can undermine the very process of economic growth. As such, the fiscal policy of an underdeveloped country should be designed in such a manner as to curb inflationary forces arising during the process of economic growth.

(v) The fifth objective of fiscal policy should be to eliminate, as far as possible, the glaring economy inequalities bedevilling the economy and to bring about an equitable distribution of income and wealth in society. The objective, however, clashes with the first objective, namely, that of rapid economic growth tlirough maximization of the rate of capital formation. Rapid economic growth is not possible without maximization of aggregate saving in the economy. And aggregate savings cannot be increased unless there are wide disparities in income and wealth distribution. A wise, prudent government should attempt through appropriate measures to reconcile the two conflicting objectives of rapid growth and social justice in a judicious manner.

(vi) The sixth objective of fiscal policy should be to eliminate, as far as possible, sectoral imbalances arising in the economy from time to time. Though the fiscal policy as visualized above, will help to maintain price-stability in the economy as a whole by curbing inflationary forces, there may arise sectoral price fluctuations in certain sectors of the economy on accout of the existence of certain bottlenecks. To ward off that possibility, fiscal policy must be attuned to correct such imbalances in time before they could inflict any damage on the economy.

BUSINESS CYCLES

The volume of business and economic activities in an economy is shown by various indications, such as, the level of employment, output, income and price level. The course of business and economic activities newer runs smooth. There are fluctuation in business and economic activities in an economy. But all the fluctuations in an economy are not cyclical. The cyclical fluctuations do not confine to specific sectors but tend to spread over the entire field of business activities. They reflect changes in the business as a whole. Thus business cycles do affect almost every business firms and its business decision. Ever)' business firm must have the knowledge of the causes of cyclical fluctuations and imminent trend of business cycle

so that it can make appropriate changes in its decisions. The effects of business cycles may be good or bad depending upon the nature of business and phase of cycle. A businessman always tries to minimise the ill effects of the cycle.

BUSINESS CYCLE

An important feature of the working of a capitalist economy in the occurrence of alternating periods of prosperity and depression generally referred to as "business cycle". In the words of W.C. Mitchell, "Business cycle are a species of fluctuations in the economic activities of organised communities. The objective 'business' restrict the concept to fluctuations in activities which are systematically conducted on a commercial basis. The noun 'cycles' bars out fluctuations which do not occur with a measure of regularity". According to Keynes, "A trade cycle is composed of periods of good trade characterised by rising prices and low unemployment percentages, altering with periods of bad trade characterised by falling prices and high unemployment percentages." In short, the business cycle is an alternate expansion and concentration in overall business activity, as evidenced by fluctuations in measures of aggregate economic activity such as, the gross product, the index of industrial production, employment and income.

The cyclical fluctuations have a tendency towards simultaneous appearance in all the branches of the national economy A period of prosperity is followed by a period of depression. In Crowther's opinion. '"Ebb and flow is a correct description of the movements of prices and employment. They do not move in haphazard fluctuation but in cycles of quite consideration regularity. An upward movement of prices and employment over several years is succeeded by a downward movement. Business cycle can be accepted as a natural phenomenon of economic system.

CLASSIFICATION OF BUSINESS CYCLES

Prof. James Arthur Estey has classified business cycles under the following heads:

(i) Major and Minor Cycles. Major cycles are the fluctuations of business activity occurring between successive crises. Major cycles constitute the intervals between successive major downturns of business activity or between major

recessions. Each major cycle is made up of two or three minor cycles. The upswing of business in the major cycle is often interrupted by minor downswings. Similarly the downswings of business in the major cycle may be interrupted by minor upswings.

(ii) Building Cycles. The refers to the cycle of building construction. The duration of the building cycles is longer than that of the business cycles,

(iii) Kondratieff Cycles (or long waves). The long waves in economic activity were discovered by the Russian economist, Kondratieff.

Summing up the fundamental changes in economic activities include three kinds of cycles—the short or minor the Kileturi cycles of duration of 40 months or so, the major or the Juglar cycle, composed of three minor cycles and of the duration of 10 years or so and finally, the Kondratieff cycles (or long waves), made up of 6 Juglar cycles and of the duration of 60 years.

PHASES OF A TYPICAL BUSINESS CYCLE

A typical business cycle is characterised by five different phases or stages—(1) Depression. (2) Recovery (or Revival) (3) Prosperity (or full employment), (4) Boom (or overfill employment), and (5) Recession.

1. Depression. It is a protected period in which business activity in the country is far below the normal. It is characterised by a sharp reduction of production, mass unemployment, low employment, falling prices, falling profit, low wages, contraction of credit, a high rate of business failures and an atmosphere of all round pessimism and despair. All construction activities come to a more or less complete standstill during a depression. The complete standstill during a depression. The consumer goods industries and however, not much affected.

2. Recovery (or Revival). It implies increase in business activity after the lowest point of the depression has been reached. The entrepreneurs begin to feel that the economic situation was after all not so bad. This leads to improvement in business activity. The industrial production picks up slowly and gradually. The volume of employment also steadily increases. There is a slow rise in prices accompanied by a small rise in profits. Wages also rise. New investments take place in capital goods industries. The banks also expand credit. Pessimism is gradually replaced by an

atmosphere of all round cautious hope.

3. Prosperity (or Full Employment). This stage is characterised by-increased production,, high capital investment in basic industries, expansion of bank credit, high prices, high profits and full employment. There is a general feeling of optimism among businessmen and industrialists.

4. Boom (or, Overfill Employment). The prosperity phase leads to the emergence of boom. In this stage of rapid expansion in business activity to new high marks resulting in high stocks and commodity prices, high profits and overfill employment. There is undue optimism among businessmen and industrialists who make additional investments in the various branches of the economy. The number of jobs exceeds the number of workers available in the market. Such a situation is known as overfill employment. Profits touch a new height. Businessmen further increase their investments. Run away inflation raises its head in all its ugliness. Prices risk sky-high. The tempo of boom reaches new heights. There is an atmosphere of over-optimism all around. But this carries with it seeds of self-destruction. Bottlenecks begin to appear in various sectors of the economy.

5. Recession. Over-optimism is replaced now by over-pessimism characterised by fear and hesitation on the part of the businessmen. The failure of some businesses creates panic among businessmen. The banks begin to withdraw loans from business enterprises. More business enterprises fail. Prices collapse and confidence is rudely shaken. Building construction slow down and unemployment appears in basic, capital goods industries which gradually spreads to other industries as well. Unemployment leads to fall in income, expenditure, prices and profits. Recession has a cumulative effect. Once a recession starts, it gees on gathering momentum and finally assumes the shape of depression.

THEORIES OF BUSINESS CYCLE

To seek an explanation of the causes of business cycle, various theories have been put forward from time to time to throw light on this highly complex phenomenon of the capitalist world. These theories can be classified broadly into:

(a) Non-monetary theories,

(b) Monetary theories.

Among the non-monetary theories are — (1) Meteorological (or Sunspot Theory; (2) Psychological Theory; (3) Over-production Theory, (4) Over Saving Theory; (5) Innovation Theory; and (6) Cobweb Theorem.

Among the monetary theories Of Business cycle the important ones are the following :

(i) Howtrey's Theory; (ii) Dr. Hayek's over-investment Theory; (iii) Keynes' Theory; (iv) Prof. Hicks Theory of Business cycle.

A full treatise is required to discuss in fuller details all these theories. A few of the old theories are no longer accepted now. We shall discuss here only the most important theories of business cycle.

1. Over-Investment Theory. According to this theory trade cycle occurs because of the over investment in investment industries. The investment industries are building and construction, iron and steel; engineering etc. During every boom investment increases. This statement is supported by the fact that during boom, investment goods industries expand faster than consumption goods industries and during depression investment goods industries suffer more than consumption goods industries.

However, opinion among the writers differs on (he question as to why in the boom phase investment goods industries expand faster than consumption goods industries.

Hayeis Machlup, Ropke and Ribbons hold banks responsible for it. Banks give credit at unduly low rates of investment and in this way they encourage investment. Credit being cheap, all sorts of inefficient and even uneconomical units are set up. The entrepreneurs adopt more and more rounds about methods of production. Resources are withdrawn from consumers goods industries and invested in production goods industries through the process of forced spying. This brings about the disparity in the growth rates of consumption goods industries and investment goods industries. At some points the banks feel that too much credit has been created. They raise the rate of interest. Borrowing becomes a costly affair and the rate of investment falls this

will bring about the contraction of credit and hence contraction of economic activity leading to depression.

But economists like Cassel consider the process of production rather than the expansion of bank credit to be more important cause of a trade cycle. According to them a revival in economic activity leading to boom takes place because of real forces like new inventions. However here also the assumption of 'elastic money supply' remains.

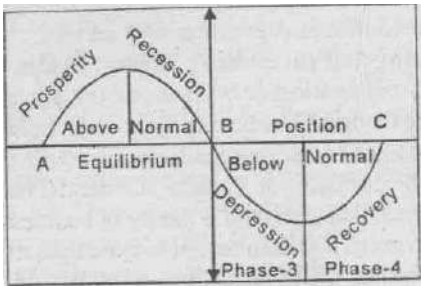
2. Under Consumption Theory. The chief exponent of this theory is I. S. Hobson. According to him, trade cycles appear due to mal-distribution of national income. This mal-distribution of national income takes place because during boom the entrepreneurs and businessmen gather income with business activities and banks and become richer. Since they cannot consume the whole income they save. There is too much saving during the boom period. Reduction in the level of consumption means a fall in the demand for consumers' goods because the amount saved is not spent on consumption. The supply of consumers goods will be far greater than the demand for them. Prices of these goods begin to fall. The general outlook becomes pessimist. If this downward movement continues depression will set in.

3. Keynes' Saving and Investment Theory. In this 'General' Theory Keynes has given an explanation of business or trade cycle. Keynes never attempted an elaborate theory of business cycle as such. In fact business cycles show rhythmic fluctuations in the aggregate income, output and employment which is the main subject matter of Keynes 'General Theory'. In Dillard's words, "Keynes' General Theory is not a theory of business cycle as such. It is much more and also much less than that, it is more than a theory of business cycle in the sense that it offers a general explanation for the level of employment quite independently by the cyclical nature of changes in employment. It is less than a complete theory of business cycle because it makes no attempt to give a detailed account of the various phases of the cycle and docs not examine closely the empirical data of cyclic fluctuations, something which any complete study of the business cycle would presumably do."

According to Keynes business cycles appear as a result of the fluctuations in the rate of investment and the fluctuations in the rate of investment are due to the marginal efficiency of capital (MEC) Keynes' has defined marginal efficiency of capital as the

relation between the prospective yield of that type of capital and the cost of producing the units." In simple words, we define marginal efficiency of capital as the expected rate of profit on new investment or capital goods. Thus, the fluctuations in economic activity are due to the marginal efficiency of capital or the expected rate of interest on new investment. The rate of interest which is the second determinant of investment is stable in short period and in the long period it can not go beyond a maximum and minimum limit. It is, therefore, the marginal efficiency of capital which is always fluctuating due to complex variables viz.; expected trends of prices, element of risks in enterprise, the existing stock of capital goods. Therefore, fluctuations in investment are largely due to fluctuations in the marginal efficiency of capital. When the marginal efficiency of capital rises there will be burst in investment leading to a boom.

The burning point from the boom to contraction is explained by saying 'hat there is a decline in the prospective yields on capital (i.e. marginal efficiency of capital) due to growing increase of the capital goods. A wave of boom will set in and this will cause a further fall in marginal efficiency of capita. The result will be deciding production and consequent depression. Just as Keynes' explains the turning point from boom to contraction, similarly, he explains that a change from depression to recovery is due to the revival of the marginal efficiency of capital. Along with the revival of marginal efficiency of capital, there will be the revival of business confidence which is more important. Because without the revival of business confidence even if the rate of interest is reduced, investment will remain the same because in the absence of business confidence marginal efficiency of capital remains low. As the investment increases income increases more due to the multiplier effect so the overall business activity starts upwards.



4. Hicks' Theory of Trade cycle. Prof Hicks explains the phenomenon of trade cycles by combining the principle of multiplier and acceleration. According to Hicks, investment is of two types. (i) Autonomous investment and (ii) Induced investment. Autonomous investment is independent of the variations in income,

output and consumption, while induced investment is determined by the fluctuations in income, output and consumption. The force of autonomous investment is expressed in multiplier while the force of induced investment is expressed in acceleration. Thus, according to Hicks, autonomous investment and induced investment cause cyclical fluctuations in economic activity via multiplier and accelerator respectively.'

Let us assume that the initial equilibrium position of the economy is disturbed by a change in autonomous investment. This will lead to increase in income and output to the extent indicated by the multiplier. Now this expansion of income and output will affect the induced investment via the accelerator. This gives rise to further expansion of income (multiplier) and investment (accelerator) of the economy and so on. In this way during this period of upswing, output increases faster than the equilibrium rate. Investment also increases faster than the normal rate. The expansion of income and output will continue till the economy reaches the upper limit or ceiling determined by full employment. After this ceiling, it starts declining. The rate of expansion in output and income is slowed down to the natural rate. This leads to decrease in the amount of induced investment. The multiplier and accelerator forces will work in the reverse order. A fall in investment reduces income at a faster rate and the reduced income again reduce the level of investment and so on. Now the level of output and income will not only reduce to the equilibrium level but rather below it. The reason is obvious as the multiplier and the accelerator work just in the opposite directions. This will go on declining till it reaches the minimum (lower) turning point. Thus, the cycle is complete the main limitation of this theory lies in the use of acceleration principle which the modern economists consider as a crude tool.

This principle assumes that investment generated by a change in output is independent of the absolute size of the change.

EFFECTS OF CYCLICAL FLUCTUATIONS

The effect of cyclical fluctuations on business firms may sometimes be good and sometimes bad. While certain effects produce favourable consequences and certain effects produce adverse effects. During revival and expansion, demand increases, selling prices rise more rapidly than costs, profits increase and individual

manufacturers and merchants generally feel happy. However, even revival and the commencement of expansion produce a few ill-effects. Gradually there is increase in raw material prices, labour costs and rents. The rate of interest also goes up.

Later on when the situation becomes more difficult, the evil of cancellation develops. The businessman finds that his customers are refusing to take goods which they have ordered and that there is a decline in the volume of orders. As far, the later stages of expansion are concerned, business concerns are confronted by much more severe competition. Prices are maintained with difficulty. Collections are slow while at the same time banks and trade creditors press for the settlement of their claims.

The decline in prices which is characteristic of the period of recession usually finds merchants and producers with large inventories that depreciate, materially in value with time. Thus excessive inventories are usually made up of finished goods rather than raw materials.

As this period is characterized by liquidation, the individual firm is compelled to sell his goods at a loss in order to meet his obligations. This may result in either bankruptcy, shutting down or operation at a reduced rate; all involving at least a sacrifice of profits and possibly necessitating the carrying on the business at an actual loss.

During contraction, these difficulties are likely to continue. One of the most important reasons for financial loss during such as period is found in the continuation of fixed charges of all kinds. It is seen that during this period, the individual concern try to reduce the direct costs by the discharge of labour and the reduction of purchases of raw materials but most of the elements of overheads cost cannot be so reduced. The firm is also obliged to operate below capacity which is contributory to the financial loss.

The above analysis makes it clear how an average business unit is made to feel the ill effects of the business cycle. As the cycle in its major movements lies quite beyond the control of the individual manufacturer, it simply tries to avoid the evil effects by adopting his operating programme to change in external condition with an increasing knowledge of business cycle on the part of the manufacture in general this process of adoption is being followed more widely.

MINIMIZING EFFECTS OF BUSINESS CYCLE

The methods adopted and followed by businessmen to minimize the effects of the business cycle fall into two general categories:

(i) Preventive Measures. Methods based on prevention and foresight that are designed to prevent the Individual concern from suffering severally during recession and contraction.

(ii) Relief Measures. Method of relief that are made to assist in the recovery following a period of contraction.

The first kind includes all measures that would be used during the period of expansion for the sake of regulating purposes, safe-guarding assets and avoiding unwise credit expansion.

The second category includes measures that might be adopted during contraction so that the sales are stimulated and production is stabilized. The use of measures of the first type is only possible when there exists on the part of the managers of the concern in question a knowledge of:

(i) The economic characteristics of the business cycle and the usual sequences of events during such a period.

(ii) The practical world of business that enables an intelligent judgement to be made at any time as to the phase of the cycle through which business is then passing.

(iii) The behaviour of that particular business enterprise during the business cycle.

It is necessary that studies are previously made with a view to determine the precise relation between cyclical changes in general business and cyclical changes in the business of the given enterprise. In particular cyclical movements in production and sales and as the prices of commodities purchased and sold, should be studied in their relation to the general business cycle. Having this knowledge constitutes an important step in an intelligent programme made to adopt business policies to external business changes, statistics regarding production, sales, purchases, raw materials costs, selling prices, stock of raw materials, stock of finished goods etc. should be collected periodically and may be presented graphically for logical interpretation and decision-

taking.

Preventive Measures. The various preventive measures are as follows:

1. Conserving assets during expansion, avoiding under increase in plant and equipment and dividends.
2. Managing plant in such a way as to (a) avoid increase in unit production, (b) avoid increase in unit overheads, (c) maintain satisfactory labour conditions and steady employment throughout the year.
3. Avoiding excessive inventories of raw materials, materials in process and finished products.
4. Avoiding purchase commitments in excess of financial and of reasonably quick use.
5. Avoiding excessive sales that result in cancellations.
6. Employing flexible credit standard that may be tightened during expansion and relaxed during contraction.

Relief Measures. Of the various measures taken to mitigate the effects t of contraction, the following are worth mentioning.

(i) Quick liquidation of inventories.

(ii) Reduction of costs of manufacture both direct and indirect.

(iii) (///) Improvement of Equality to increase demand.

(iv) Adoption of selling methods based on proper analysis of the situations.

(v) Development of plant and organization for future business.

(vi) Past-time operation.

(vii) Utilization of profit got during favourable times for payments to out of work employees.

(viii) Launching new merchandise lines during slack periods.

(ix) Transference of employees from one department to another contraction.

MEASURES TO CONTROL BUSINESS CYCLES

Cyclical fluctuations in business and economic activities adversely effect the process of economic development of an economy. Therefore, the government should take preventive and corrective measures to maintain stability in economic system. Two types of measures are adopted to control business cycles.

(a) Preventive measures.

(b) Corrective measures.

(a) Preventive measures. The preventive measures aim at avoidance of the occurrence of business cycles and these are:

1. To reduce the dependence of agriculture on nature. The dependence of agriculture on nature causes fluctuations in agricultural production and which in turn causes fluctuations in national income and employment particularly in under-developed countries. Therefore, the government should develops irrigation facilities and take other appropriate measure to reduce the dependence of agriculture on nature.

2. Equilibrium between demand supply. The government should maintain the balance between demand supply of score goods by imports and buffer stocks policy.

3. Check on speculative activities. Speculations causes the cyclical fluctations. Therefore, there should be effective check on these activities. The profetiers and hoarders be sternly dealt with. There should be check on black-making.

4. Nationalisation of basic industries. The nationalisation of basic industries would help in maintaining equilibrium between demand supply. It would also help in checking monopolies.

(b) Corrective measures. The main corrective measures are : (1) Monetary Policy (2) Fiscal Policy and (3) Direct Controls.

1 = Monetary Policy. Monetary policy refers to the control of money supply and cost of credit in the economy. In other words monetary policy means to use the

various method of credit control by the control bank. If there is a tendency of over expansion in business activities, the Central Bank should follow the policy of credit contraction to check unnecessary expansion of business activities. On the other hand when there are recessionary trends in the economy then central bank should resort to the policy of credit expansion to control the downward swing in business activities. The Central Bank uses two types of credit control (i) quantative measures and (//) selective measures of credit control.

The quantative measures are those measure which control the total credit in the economy. The main method of quantative are—Bank Rate, Open market operations, change in Cash Reserve Ratio and Statutory Liquidity Ratio. The selective credit control measure aim at controlling the availability of credit for specific purposes and business activities. The main selective measures of credit controls are—change in margin requirement of loans, credit rationing, direct action and moral persuasion.

To make the monetary policy' more effective all the measures of credit control be used simultaneously because each measure has its own limitations. The monetary policy is more effective in controlling been conditions in the economy. In times of depression the business community is in the grip of pessimism due low profit expectations and hence inducement to invest is absent. Mere expansion of credit will not increase the inducement to invest in business community. Therefore, monetary policy alone is not effective to control business cycle.

2. Fiscal Policy. Fiscal policy refers to the management of public revenue, expenditure and public debt to achieve certain objectives. The main source of public revenue are taxes. The fiscal policy of the government affects the business activities and inducement to invest to a great extent. Therefore, government can control cyclical fluctuations by making appropriate change in taxation, public expenditure and public debt policies, i.e. fiscal policy. An increase in public expenditure and cut in taxes during depression increase the aggregate demand in the economy. Increase in aggregate demand increases income and employment, and as well as it induce of the business community to increase in investment. Thus reduction in taxes and increase in public expenditure in times of depression help in the expansion of business activities. On the other hand a reduction in public expenditure and increase in taxes during inflation reduces aggregate demand and thus check the undesirable expansion in

business activities. Thus, a judicious fiscal policy can effective control, cyclical fluctuations in the economy. The main instrument of fiscal policy is budget.

The budget controls the size of public expenditure and public revenue. In times of depression government should follow the policy deficit financing by adopting^ deficit budget because in times of depression the price investment expenditure is at low level. Therefore, the deficiency in private investment will have to made up by large capital expenditure by the government. Government investment can be increase by deficit financing. The deficit budget has an expansionary effect of aggregate demand. The deficit in budget by secured by increasing public expenditure and reducing taxes.

In times of boom and inflation government should follow the policy of surplus budget. The surplus in the budget should by secured by both increasing taxes and reducing public expenditure. The surplus budget would reduce the aggregate demand in the economy and thus would help in checking inflationary tendencies in the economy. A built in flexibility should be introduced in public financial system. Built-in flexibility in public finance mean automatic adjustment of expenditure and taxes in relation to cyclical fluctuations. Progressive taxation policy be followed to introduce flexibility in the structure. Similarly government expenditure an unemployment relief, social security, etc. should automatically change inversely to cyclical fluctuations. By built in flexibility there will automatic adjustment in budget. Built-in-flexibility integrates short-term and long-term fiscal policy. It also helps in preventing the occurrence of trade cycles. But more built-in-flexibility is not sufficient. The government will have to take discretionary fiscal measures to control business cycles.

3. Direct controls. For the speedy and effective control of business cycles government should resort to direct physical controls. Direct controls include licensing, rationing of scare and essential goods, price and wage controls, export-import controls, exchange controls, control over hoarding and black marketing, control of monopolies and restrictive trade practices, etc. But the success of direct controls depend upon the efficiency of public administration. In absence of the will and efficiency of administration, these measures may encourage black marketing, speculations and corruption. Therefore, these measures should be resorted in emergency only.

Conclusion. No single method is sufficient to control cyclical fluctuations. Therefore, all the methods be used simultaneously and judiciously. The success of anti-cyclical policies depends upon correct forecasting of cyclical change and effective implementation of policy measures.