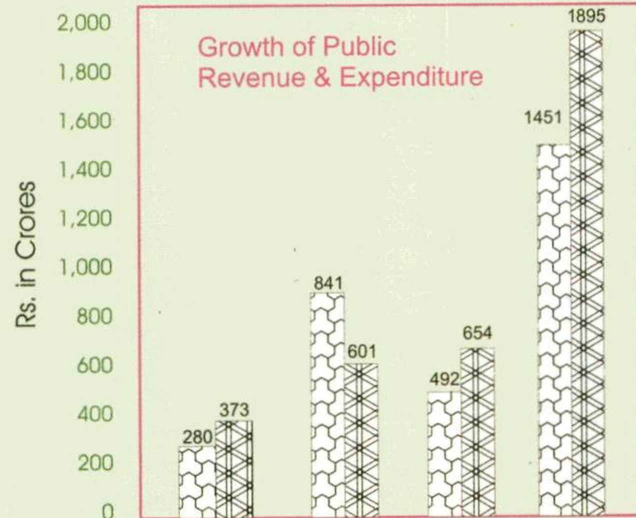
Karnataka State Open University
Manasagangothri, Mysore- 570 006

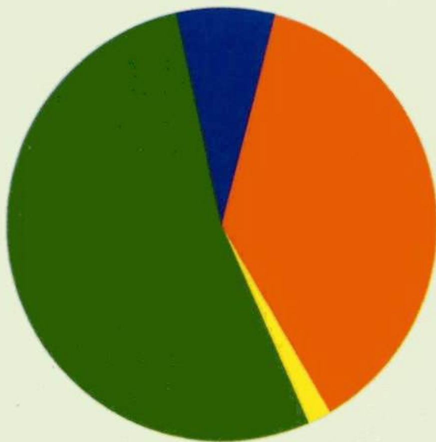
ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮುಕ್ತ ವಿಶ್ವವಿದ್ಯಾನಿಲಯ
ಮಾನಸಗಂಗೋತ್ರಿ, ಮೈಸೂರು ೫೭೦ ೦೦೬

COURSE : 4

M.A. (PREVIOUS)
PUBLIC ECONOMICS

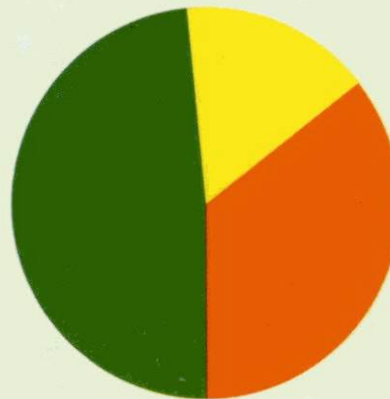
329





ALLOCATION OF RESOURCES

- Agriculture
- Industry
- Tertiary Sector
- Other Sector



DISTRIBUTION of PUBLIC GOODS

- Public Sector Goods
- Private Goods
- Joint Goods

ಉನ್ನತ ಶಿಕ್ಷಣಕ್ಕಾಗಿ ಇರುವ ಅವಕಾಶಗಳನ್ನು ಹೆಚ್ಚಿಸುವುದಕ್ಕೆ ಮತ್ತು ಶಿಕ್ಷಣವನ್ನು ಪ್ರಜಾತಂತ್ರೀಕರಿಸುವುದಕ್ಕೆ ಮುಕ್ತ ವಿಶ್ವವಿದ್ಯಾನಿಲಯ ವ್ಯವಸ್ಥೆಯನ್ನು ಆರಂಭಿಸಲಾಗಿದೆ.

ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿ 1986

The Open University system has been initiated in order to augment opportunities for higher education and as instrument of democrating education.

National Education Policy 1986

ಮುಕ್ತ ವಿಶ್ವವಿದ್ಯಾನಿಲಯವು ದೂರಶಿಕ್ಷಣ ಪದ್ಧತಿಯಲ್ಲಿ ಬಹುಮಾಧ್ಯಮಗಳನ್ನು ಉಪಯೋಗಿಸುತ್ತದೆ. ....ವಿದ್ಯಾಕಾಂಕ್ಷಿಗಳನ್ನು ಜ್ಞಾನ ಸಂಪಾದನೆಗಾಗಿ ಕಲಿಕಾ ಕೇಂದ್ರಕ್ಕೆ ಕೊಂಡೊಯ್ಯುವ ಬದಲು, ಜ್ಞಾನ ಸಂಪತ್ತನ್ನು ವಿದ್ಯೆ ಕಲಿಯುವವರ ಬಳಿ ಕೊಂಡೊಯ್ಯುವ ವಾಹಕವಾಗಿದೆ.

ಡಾ. ಕುಳಂದೈಸ್ವಾಮಿ

"The Open University system makes use of Multimedia in distance education system. .... it is vehicle which transports knowledge to the place of learners rather than transport to the place of learning.

Dr. Kulandai Swamy

ಸುವರ್ಣ ಕರ್ನಾಟಕ ವರ್ಷ 2006

ವಿಶ್ವ ಮಾನವ ಸಂದೇಶ

ಪ್ರತಿಯೊಂದು ಮಗುವು ಹುಟ್ಟುತ್ತಲೇ - ವಿಶ್ವಮಾನವ. ಬೆಳೆಯುತ್ತಾ ನಾವು ಅದನ್ನು **'ಅಲ್ಪ ಮಾನವ'**ನನ್ನಾಗಿ ಮಾಡುತ್ತೇವೆ. ಮತ್ತೆ ಅದನ್ನು **'ವಿಶ್ವಮಾನವ'**ನನ್ನಾಗಿ ಮಾಡುವುದೇ ವಿದ್ಯೆಯ ಕರ್ತವ್ಯವಾಗಬೇಕು.

ಮನುಜ ಮತ, ವಿಶ್ವ ಪಥ, ಸರ್ವೋದಯ, ಸಮನ್ವಯ, ಪೂರ್ಣದೃಷ್ಟಿ ಈ ಪಂಚಮಂತ್ರ ಇನ್ನು ಮುಂದಿನ ದೃಷ್ಟಿಯಾಗಬೇಕಾಗಿದೆ. ಅಂದರೆ, ನಮಗೆ ಇನ್ನು ಬೇಕಾದುದು ಆ ಮತ ಈ ಮತ ಅಲ್ಲ; **ಮನುಜ ಮತ.** ಆ ಪಥ ಈ ಪಥ ಅಲ್ಲ; **ವಿಶ್ವ ಪಥ.** ಆ ಒಬ್ಬರ ಉದಯ ಮಾತ್ರವಲ್ಲ; ಸರ್ವರ ಸರ್ವಸ್ತರದ ಉದಯ. ಪರಸ್ಪರ ವಿಮುಖವಾಗಿ ಸಿಡಿದು ಹೋಗುವುದಲ್ಲ; ಸಮನ್ವಯಗೊಳ್ಳುವುದು. ಸಂಕುಚಿತ ಮತದ ಆಂಶಿಕ ದೃಷ್ಟಿ ಅಲ್ಲ; ಭೌತಿಕ ಪಾರಮಾರ್ಥಿಕ ಎಂಬ ಭಿನ್ನದೃಷ್ಟಿ ಅಲ್ಲ; ಎಲ್ಲವನ್ನು ಭಗವದ್ ದೃಷ್ಟಿಯಿಂದ ಕಾಣುವ **ಪೂರ್ಣದೃಷ್ಟಿ.**

ಕುವೆಂಪು

Gospel of Universal Man

Every Child, at birth, is the universal man. But, as it grows, we turn it into "a petty man". It should be the function of education to turn it again into the enlightened "universal man".

The Religion of Humanity, the Universal Path, the Welfare of All, Reconciliation, the Integral Vision- these ***five mantras*** should become View of the Future. In other words, what we want henceforth is not this religion or that religion, but the Religion of Humanity ; not this path or that path, but the Universal Path ; not the well-being of this individual or that individual, but the Welfare of All ; not turning away and breaking off from one another, but reconciling and uniting in concord and harmony ; and, above all, not the partial view of a narrow creed, not the dual outlook of the material and the spiritual, but the Integral Vision of seeing all things with the eye of the Divine.

Kuvempu

Karnataka State
Open University

Economics
Course 4

Block 6

Introduction

Unit 22
Fiscal Policy 01 to 16

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Interdependency of Fiscal and Monetary Policies 17 to 29

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Fiscal Policy and Stabilisation 30 to 41

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Unit 22 to 24

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Block 6 Fiscal Policy

Introduction

Fiscal policy plays a crucial role in pursuing planned economic development especially in mixed economies. It plays a multidimensional role starting from creating growth impulses to maintenance of full employment in the economy. This block makes an attempt to examine the role and importance of fiscal policy, tools and mechanism of fiscal policy, nature and objectives of fiscal policy in the context of the LDcs (unit 22). The next unit 23 focuses on the importance of interdependence and co-ordination between fiscal and monetary policies. Because to produce the desired impact on the economy these two policies should be compatible and not be contradictory. In unit 24 there is discussion on the nature and composition of fiscal policy and its automatic impact on the level of economic activity. It calls for automatic and discretionary measures, built in flexibility and adaptability of the policy. The focus of this block is exclusively on fiscal policy and its mechanism as a stabilization tool.

UNIT 22 FISCAL POLICY

Structure

22.0 Objectives

22.1 Introduction

22.2 Meaning of Fiscal Policy

22.3 Role and Importance of Fiscal Policy

- 22.3.1 Traditional view
- 22.3.2 Keynes view
- 22.3.3 Modern view
- 22.3.4 Latest view

22.4 Objectives of Fiscal Policy

22.5 Functions of Fiscal Policy

- 22.5.1 Allocation of Resources
- 22.5.2 Distribution of Income and Wealth
- 22.5.3 Economic Stabilization
- 22.5.4 Capital Formation and Economic Growth

22.6 Instruments of Fiscal Policy

- 22.6.1 Budget
- 22.6.2 Taxation
- 22.6.3 Public expenditure
- 22.6.4 Public Debt.

22.7 Fiscal Policy in the Less Developed countries

22.8 Let us Sum Up

22.9 Key concepts

22.10 Self-assessment questions

22.11 Further Readings

22.0 OBJECTIVES

This unit enables you to understand the

- Meaning and importance of fiscal policy
- Objectives and functions of fiscal policy
- The Classical, Keynesian and latest views about the role and significance of fiscal policy
- Major instruments of fiscal policy and their mechanism and
- Role of fiscal policy in the less developed countries

22.1 INTRODUCTION

As an instrument of macro economic policy, fiscal policy is very popular with modern governments expenditure and tax payment. Through this policy every government wants to influence the major macro economic variables like aggregate demand, aggregate supply, gross national product, employment, prices, income, consumption, savings, investment etc. The deliberate use of fiscal policy helps to manipulate the level and composition of effective demand and maintain macro economic balance from its modest beginnings in the forties, fiscal policy today has become a major instrument employed by the governments to achieve full employment to present inflation and to promote rapid economic growth.

22.2 MEANING OF FISCAL POLICY

In his General Theory (1936), J.M.Keyens explained the fiscal policy and made out a strong case for the same. He viewed it as a state policy which used public finance as a balancing factor in economy's development. Fiscal Policy consists of steps and measures which the government takes both on the revenue and expenditure sides of the budget. Fiscal policy refers to the regulation of the level of government spending, taxation and public debt. Thus it operates through taxation, expenditure and borrowing programmes of the government.

The term 'fiscal' has been derived from the Greek word 'fisc' meaning a basket to symbolize the public purse, 'Fisc' thus refers to the treasury. Fiscal policy therefore, means the policy related to the treasury of the government.

According to Arthur Smithies, the term fiscal policy refers to "a policy under which government uses its expenditure and revenue programmes to produces desirable effects and avoid undesirable effects on the rational income, production and employment.

According to Bachelor "fiscal policy means the use of public finance or expenditure, taxes, borrowing and financial administration to further national economic development".

According to Mrs. Ursula Hicks, "fiscal policy is concerned with the manner in which all the different elements of public finance may collectively be geared to forward the aims of economic policy".

According to Prof. Gardner Ackley, "fiscal policy involves alterations in government expenditure and taxes".

Harvey and Johnson M. define fiscal policy as "changes in government expenditure and taxation designed to influence the pattern and level of activity".

According to G.K.Shaw "we define fiscal policy to include any design to change the price level , composition or timing of government expenditure or to vary the burden, structure and frequency of the tax payment.

UN Report on Taxes and Fiscal Policy opines that fiscal policy is assigned the central task of wrestling with the pitifully low output of underdeveloped countries, sufficient savings to finance economic development programmes and to set the stage for more vigorous public investment activity.

According to American Economic Association "fiscal policy should mean the policy which concerns itself with aggregate effects of government expenditure and taxation on income, production and employment.

According to alto Eckstein " fiscal policy means changes in taxes and expenditure which aim at short run goals of full-employment, price level and stability".

From these definitions it is clear that fiscal policy plays an important role in influencing the rate of economic development. Through this policy the government can influence and alter the behaviour of the economy. Fiscal Policy refers to the government choice regarding the overall level of public expenditure and taxes.

Now let us proceed further and examine the views of the different schools of thought on the role ad importance of fiscal policy.

22.3 ROLE AND IMPORTANCE OF FISCAL POLICY

1. Traditional view
2. Keynes view
3. Modern view

22.3.1 Fiscal Policy: Traditional view

The classical economists were the champions of free trade and therefore they did not like state intervention in economic matters. They had a firm belief in the policy of laiessez faire. The Say's Law of Markets one of the corner stones of the classical system argued that supply always creates its own demand and therefore there are no possibilities of general overproduction and unemployment. The classical analysis placed emphasis on market mechanism and self-correcting behaviour of the economy. They opined that the role and functions of the government should be as minimum as possible and they should not affect the natural working of the market. Since market is capable of bringing about the natural adjustments in the macro economic variables there is no need for deliberate efforts by the government to influence and manipulate the working of the economy. The classicists thought that market forces would ensure full employment and optimum allocation and utilization of resources in the economy.

The classical economist argued that taxes are nothing more than unproductive expenditures resulting in wrong diversion resources. They considered it more desirable that the government should perform only minimum essential functions and not interfere in the natural working of the economic system. According to Adam Smith, economic equilibrium and progress are attained through the inherent and self-oriented endogenous forces of the economic system. Thus when full employment is supposed to reach automatically, there is no need for government intervention. It means that when government's production is zero in a free enterprises 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. It is a known fact that government services are rendered at the cost of the national product and it amounts to a cut in the aggregate national product. Even if governmental efforts are productive, they cannot increase national income and level of economic activity above the level reached without its intervention. 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.

On all these grounds, the classicists condemned all budget deficits which necessitate borrowing and lead to inflationary tendencies in the economy. They firmly advocated a balanced budget and the balanced budget principle was recognized as a principle of sound finance in the classical economics. Classicists favoured a blanced budget criterion for the following reasons.

a) Unbalanced budget makes the government borrow and governments market borrowings cause reduction in loanable funds available to private productive investment and employment activities.
b) Unbalanced budget implies a wide extension of state functions beyond the capacity of the government and wasteful expenditure.

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

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

Thus according to the principles of sound finance, a budget must be balanced annually and the gap between revenue and expenditure should be minimum i.e., the government should tax the least and spend the least and should not resort to borrowings as far as possible. The classical economists repeatedly stressed that the fiscal policy should be neutral in its impact on economic system.

22.3.2 Fiscal Policy : Keynesian view

The concept of fiscal policy received a new vista with the publication of Keynes General Theory in 1936. Keynes theory and policy prescriptions shattered the basic foundations of the classical doctrine. Keynes made a fundamental departure from the traditional fiscal neutrality. He explained that the government should interfere in an economic system through fiscal instruments for bringing stability at a higher level of employment and income. However, Keynes did not mean to discourage private investment and enterprise. He wanted the state to play a balancing role and supplement the activities of private investors through public investment and expenditure.

Keynes explained that the market mechanism of free enterprise economy does not necessarily ensure an effective demand at such a level, which will ensure full employment of all the available productive resources. When economy cannot adjust itself to the changing situations, supply cannot create its own demand and as a result economy may attain equilibrium at less than full employment level. Unemployment may persist due to secular forces causing under consumption and over saving in an advanced economy. On all these grounds, Keynes argued that economy does not have self-correcting capacity and therefore there is need for deliberate policy intervention. Therefore, Keynes regarded the inevitability of a positive fiscal policy.

Keynes recommended that fiscal policy should include progressive taxation, increased public spending and deficit financing. He favored a progressive tax policy because of its redistributive effects in favour of high consumption and against the higher propensity to save. Keynes strongly recommended the increased public expenditure on the current purchase of goods and services, grant of subsidies and social insurance programmes. He favored the expansionary effect of public expenditure and investment. Thus according to Keynes, public expenditure plays an important role in maintaining effective demand at the required level. In Keynes view, a depression in an advanced industrial economy occurs due to the deficiency of aggregate demand. To correct the situation and help economy to move along the path of full employment, the government must increase spending directly by undertaking public works programmes on a large scale and indirectly by inducing people to spend more.

Keynes strongly criticized the orthodox sound budgetary policy and advocated unbalanced budget policy. His revolutionary thinking reconstituted the whole basis of public finance and affirmed unbalanced budget policy (functional finance) as a fiscal norm. Keynes explained that fiscal operations of the government i.e., taking borrowing public spending, management of public debt, 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.

Quite contrary to the classical notion, the concept of functional finance suggests that the state need not and should not assume a passive role in the economic affairs of the country, through fiscal policy instruments government can promote economic progress with stability. Thus functional finance deliberately aims at unbalancing the budgets particularly deficit budgeting in the less developed countries as an effective means of achieving and maintaining planned economic development.

22.3.3 Fiscal Policy: Modern views

Many post-keynesians are of the view that an effective fiscal policy is the best means to promote economic growth with stability and justice. They stress that the government has to play a positive role to regulate and control the economy through fiscal policy measures.

22.3.4 Fiscal Policy: Latest view

Since the late eighties there is a change in the role and functions of fiscal policy. After the emergence of supply side economics and rational expectations analysis there is a move towards minimizing the role of state in economic affairs. These two theories are based on government failure. Government failure is a situation where the government is unable to supply goods and services on the basis of the principle of allocative efficiency and where the activities of the government are unable to promote overall economic efficiency. Government failure is also accompanied by policy failure and implementation failure. Under these circumstances, government intervention may lead to unpredictable and undesirable consequences and the public sector behaviour will be chaotic but opportunistic.

In the case of government failure, it would be necessary to introduce some form of internal reforms. These reforms are called quasi-market reforms. The basic objective of these reforms is to introduce some principles of market efficiency like cost benefit analysis, cost-effectiveness analysis, programme budgeting and the like so that the public sector can manage its activities in a more efficient way and revive and strengthen the market forces and direct them to work in the right direction to produce the desired results. Quasi-market reforms involve less state participation and more of the market principle in the allocation of resources, output production and price fixation. The basic idea of these reforms is to introduce the principle of marketisation and the process of privatization in same areas of activities to gain economic efficiency. Fiscal retrenchment is an important component of these reforms.

Fiscal Retrenchment. The New Approach

In recent year large number of developed and developing countries are facing the problem of heavy fiscal deficits and most of them have became indebted to foreign countries. In fact a large number of developing countries are in deep debt crisis. To come out of the situation and to reduce fiscal deficits, many countries are now practicing fiscal retrenchment. Fiscal retrenchment means the reduction of fiscal deficits and such a reduction is necessary to keep the budget in balance. It calls for rationalization of taxes, reduction in public expenditure and welfare spending.

Now many countries feel that it is better to reduce fiscal deficit for higher economic growth in the future and better macroeconomic management.

22.4 OBJECTIVES OF FISCAL POLICY

Fiscal policy is essentially budget policy which encompasses all measures pertaining to the level and structure of government financial operations i.e., public revenues public borrowing and public expenditure intended to serve certain public policy objectives. The basic objectives of fiscal policy may vary between the economies. In developed economies the objective is to maintain the condition of full employment, economic stability and stabilize the rate of growth. In an under-developed economy the objective is to create an encouraging atmosphere for rapid economic development.

The common objectives of fiscal policy may be listed as follows:

1. Full employment
2. Price stability
3. Accelerating the rate of economic development
4. Optimum allocation of resources
5. Equitable distribution of income and wealth
6. Economic stability
7. Capital formation
8. Encouraging investment
9. To reduce extreme inequalities in wealth, income and consumption standards
10. To minimize sectoral and regional imbalances that may arise in the process of development

At the very outset it is clear that these objectives are conflicting, it is not necessary that they should be compatible. For eg: objectives of economic growth and stability. Depending on circumstances and situations one or two objectives are emphasized and others are ignored. The successful pursuit of all the objectives all the time is impossible.

22.5 FUNCTIONS OF FISCAL POLICY

Prof. Musgrave has identified three main functions of fiscal policy. They are

a) allocation of resources
b) distribution of income and wealth
c) stabilization checking inflation and correcting other disturbing forces. To the above list one may add another important function i.e.,
d) capital formation and economic growth.

Now let us try to elaborate these functions.

22.5.1 Allocation of Resources

Fiscal policy, with the help of its instruments like taxation and public expenditure programme, can affect the allocation of resource through factor mobility in various occupations, industries and sectors. Tax exemptions and concessions may go a long way in attracting resources towards the favoured industries and sectors, subsidies and incentives can favourably influence the allocation of resources in the desired channels, similarly high taxation in a particular sector industry may discourage the flow of resources. By altering fiscal policy variables government will give the needed signals to ensure optimum allocation of resources.

In addition to allocation of resources fiscal policy also helps mobilization of resources. Almost all developing countries are suffering from low savings, low capital formation and inadequate investment. In this context private saving can be encouraged through fiscal incentives in the form of tax concessions for saving and investment and formulation and implementation of different savings schemes.

In the absence of voluntary private saving, the government itself has to save. This is done by raising the level of taxation or lowering current government expenditure so as to give the government a surplus on its current budget. The surplus is a saving by the government and is used for investment in productive projects in the public sector.

22.5.2 Distribution of Income and Wealth

Distribution of income and wealth can also be influenced by fiscal measures. A progressive taxation on wealth and property may be very helpful in reducing inequalities and in altering the distribution of income and wealth. This should be accompanied by a policy of expenditure towards the upliftment of the poor to realize the objective of equity and social justice.

The policy may also aim at changing the institutional environment through which distribution generally occurs. For eg. Land taxes aimed at altering the distribution of land ownership, investment in human capital and skill formation, taxes and subsidies aimed at changing the degree of competition among the various sectors of the economy, changes in the terms of trade between different economic activities, changes in the relative prices of luxuries, wage goods, mass consumption goods etc. In this way fiscal policy serves the objective of distributive justice.

22.5.3 Fiscal Policy and Stabilization

Another important function of fiscal policy is minimization of economic disturbances and cyclical fluctuations in the form of inflation and depression. Governments are effectively using fiscal policy to neutralize the destabilizing forces. The general theoretical framework of this reasoning is that a depression is caused by a deficiency of effective demand, fiscal policy can remedy it by increasing public expenditure and encouraging private expenditure. Similarly during a boom period the need is to control the demand. The same fiscal policy can remedy it by curtailing public expenditure and discouraging private expenditure. In this way fiscal policy tools can be used to raise effective demand during depression and reduce it during boom. The policy takes out sufficient money from the economy during inflation and injects sufficient money into the economy during a depression period. For the purpose of economic stabilization, fiscal policy may also resort to budgetary surplus, public borrowing or overvaluing the currency during a boom; similarly compensatory taxation, spending, pump priming, budgetary flexibility and proper debt management policies during a depression.

22.5.4 Fiscal Policy and Capital Formation and Economic Growth

Fiscal Policy may be tailored effectively to maintain a steady growth rate and facilitate capital formation in developing countries. And we know that an increase in investment will have a definite multiplier effects an income, employment, output and help the economy to move along the path of economic growth. Fiscal policy performs this task in two ways i.e., by expanding investment in public and private enterprises and by directing the flow of resources from socially less desirable purposes to more desirable purposes and secondly the policy changes the content of the total investment in the economy and creates capital by bringing about quantitative and qualitative improvement.

Capital formation can be facilitated by saving, taxation, deficit spending and foreign borrowings. In all these spheres, a positive fiscal policy has much to contribute. Deficit financing can be resorted to as an important fiscal measure for financing economic development. But it must be within a safe limit, otherwise of will produce a harmful galloping inflation.

In a developing economy investment expenditures work in two directions.

1. They cause an increase in total output by allowing full use of capacity and
2. Generate more income, so that there is adequate demand for the output produced.

22.6 INSTRUMENTS OF FISCAL POLICY

There are so many measures or instruments in fiscal policy which are used by the state to influence the general level of economic activity. They are

1. Budget
2. Taxation
3. Public expenditure
4. Public debt.

They also include grant of subsidies, price support programmes, civil and military expenditures and expenditures on public works as well as relief programmes.

Now let us try to understand these instruments and examine how they help to influence the general level of economic activity.

22.6.1 Budget

Budgeting is an important instrument of fiscal policy. It is used to improve the working of an economic system and to fight both inflation and depression. There are different types of budgetary principles like

(a) The annually balanced budget,
(b) the cyclically balanced budget,
(c) fully managed compensatory budge,

The classical economists propounded the principle of an annually balanced budget. They argued that it maintains balance between income and expenditure of the government, does not lead to either inflation or depression, it prevents unnecessary expenditure and above all it helps to achieve full employment without inflation. This principle requires that the state should increase taxes to get more money and reduce expenditure to balance the budget.

The cyclically balanced budget has a stabilizing effect on the economic system. During inflation and prosperity surplus budgets are prepared to curb excessive spending activities. Similarly during recession deficit budgets are prepared to inject extra purchasing power into the economy.

Fully managed compensatory budgeting policy implies a deliberate change in tax, expenditure, revenues and borrowings with the aim of achieving full employment without inflation. It assigns a secondary role to budgetary balance. This principle is also called functional finance. It has received widespread approval from the economists and businessmen.

22.6.2 Taxation

Taxation is an important instrument of fiscal policy. It includes taxes levied by union, state and local governments. Depending on the prevailing situations the government should design and adopt an appropriate tax policy.

22.6.3 Public Expenditure

Another effective tool of fiscal policy is public expenditure. The appropriate variations and changes in public expenditure can have more direct effect upon the level of economic activity than even taxes. There are two types of public expenditure namely pump priming and compensatory spending. Pump priming helps to initiate and revive economic activity in a depressed economy and also stimulates private investment. Compensatory spending involves relief expenditure, social insurance payments, public works and subsidies. Compensatory spending raises the levels of income, output and employment through its multiplier and acceleration effects.

22.6.4 Public Debt

Public debt is a sound fiscal weapon to fight against both inflation and deflation. It ensures economic stability with full employment in the economy. The government borrowing may assume many forms like

- borrowings from banks
- borrowings from the treasury
- borrowings from non-bank public and
- printing of currency notes

During a depression, the government may borrow from banks, it may borrow from the treasury at the time of deficit and the same is used to augment the level of effective demand. During inflation, to withdraw the money from the public government can resort to public borrowings. Sometimes to make up the deficit, government may print currency notes.

22.7 FISCAL POLICY IN THE LESS DEVELOPED COUNTRIES

It is a known fact that fiscal policy has to play a different role in the less developed countries. It has a tough role to play and tackle the problem of growth-cum-stability.

The nature and extent of problems are different in developing countries when compared to developed countries. Developing countries are suffering from unemployment, poverty, low capital formation, inadequate investment, under utilization of resources, low productivity, inefficiency, regional and secteral imbalances, inter-person inequities etc. Less developed countries are caught in the vicious circle of poverty and unemployment. To break this, heavy doses of investment and creation of wide range of employment opportunities are needed. But in these economies due to poor domestic savings, rate of capital formation is low. Therefore large scale public expenditure is needed. It creates strong growth impulses in the economy.

Another prime aim of fiscal policy in the LDcs is maintenance of growth, employment with stability. In a developing economy, when huge investment is undertaken to create infrastructural facilities, generally inflationary tendencies develop. Under these circumstances a sound fiscal policy should ensure price stability without affecting investment, employment and output.
In the LDcs fiscal policy is also expected to create an equitable distribution of income and wealth without adversely affecting savings, investment and economic growth. It is also true that quite often under the goal of socialism, the government undualy resorts to reduction of inequalities at the cost of growth which may lead to the distribution of poverty rather than prosperity. Therefore a proper reconciliation of these two contradictory goals is absolutely necessary.

In an underdeveloped economy, the rate of private investment is generally low. Therefore the government has to take the initiative to promote the economic development of the country. In order to meet the higher needs of investment, the government will have to collect resources through borrowings, taxation and deficit financing without creating inflation. Since deficit financing is inflationary in nature, government should resort to it only when the other sources do not provide sufficient funds.

Further, even in selecting the various kinds of taxes, the government should take into account the economic situation of the country, the effects of tax incentive, political and social power structure within the country etc. Taxes should be designed in order to mop up the economic surplus which is generated in the process of development. However the ratio of tax yield to national income is very low in these economies due to low elasticity of tax receipts. On the other hand, indirect taxation though brings revenue, will have inflationary impact on the economy.

Public borrowing is also an important means of resource mobilization. However the government must use this source very judiciously.

However, it is very difficult to assess the efficiency and effectiveness of fiscal policy in a less developed country. The objectives and instruments should be compatible and fiscal instruments should have built-in-flexibility and adaptability. In these economies the response of economic mechanism to the changes in fiscal policy is not adequate. It may be due to various factors like

- existence of a vast non-monetised sector
- market forces are very weak and do not respond adequately
- these economies are more prone to inflation
- structural rigidities and peculiar features

According to Raja.J.Chelliah, the main goal of fiscal policy in an under developed country may be the promotion of the highest possible rate of capital formation without inflation. Stability is necessary for progress but the maintenance of stability does not require a fall in the rate of saving, but a rise in the proportion of savings to income; this will enable the economy to grow, at the same time reduce unemployment and poverty and maintain stability.

This quotation explains the role and significance of fiscal policy in a developing economy.

22.8 LET US SUM UP

- Fiscal Policy is an important instrument of macro economic policy
- Fiscal Policy is pursued by government to influence and manipulate the working of the economy
- J.M.Keynes in his revolutionary theory. The General Theory of Employment, Interest and Money (1936) propounded the idea that judicious use of public spending and taxation influence the level and composition of economic activity.
- The important functions of fiscal policy are allocation, stabilization, distributive justice, capital formation and economic growth
- The instruments of fiscal policy are budget, taxation, public expenditure and public debt.
- Fiscal Policy has a different but a tough role to play in the development process of the less developed countries.

22.9 KEY CONCEPTS

1. Government failure
2. Privatization
3. Distributive justice
4. Structural rigidities
5. Multiplier and Acceleration effects

1. Government failure

It refers to a situation when the public sector fails to discharge its allocative, stabilization and distributive responsibilities efficiently. Growing inefficiency, more than proportionate expansion in public sector and rent seeking behaviour gradually lead to government failure.

2. Privatization

It refers to a process wherein gradually government withdraws itself from economic activities in favour of the private sector.

3. Distributive justice

The process of distributing income and wealth from the rich class to the poor class in order to minimize inter-person economic inequities.

4. Structural Rigidities

Problems or constraints in activating or directing the market forces. For eg: non-availability of infrastructural facilities, non-homogenous resources, technical lags, shortage of raw materials, marketing problems etc.

5. Multiplier and Acceleration effects

These effects refer to economic fluctuations from the interaction of the multiplier and accelerator. The multiplier makes output and income to rise following a rise in investment and the accelerator makes investment to increase when output increases. Once expansion starts, if the accelerator is strong, the economy tends to explode.

22.10 SELF-ASSESSMENT QUESTIONS

1. Explain the meaning and importance of fiscal policy in the context of a developing economy.
2. Give an account of the theoretical debate on the role of fiscal policy.
3. What are the basic instruments of fiscal policy?
4. Give an account of the basic objectives of a fiscal policy. Are they conflicting?
5. Critically evaluate the basic functions of a fiscal policy.

22.11 FURTHER READINGS

1. Musgrave R and Musgrave P, "Public Finance in Theory and Practice; Mc.Graw Hill, 1995.
2. B.N.Ghosh, "From Market Failure to Government Failure", Wisdom House, 2001
3. D.M.Mithani, "Modern Public Finance", Himalaya Publishing House, 1998.
4. K.P.M.Sundharam and K.K.Andley, "Public Finance : Theory and Practice", S.Chand and Company, 2001.
5. Bernard P.Herber, "Modern Public Finance", Richard D.Irwin, 1994.

6. John. F. Due and Ann . F. Friedlaender, "Government Finance; Economics of the Public Sector", A.I.T.B.S.Publishers, 1997.
7. Samphat Mukherjee, "Simple Analytics of Public Finance", Books and Allied, 2000.
8. R.K.Lekhi, "Public Finance", Kalyam Publishers, 2002

UNIT 23 INTERDEPENDENCY OF FISCAL AND MONETARY POLICIES

23.0 Objectives

23.1 Introduction

23.2 Meaning of complementarity

23.3 Need for complementarity i.e., monetary-fiscal policy mix

23.4 Formulating a co-ordinated policy

23.5 Link between monetary and fiscal policies. The Government Budget constraint.

23.6 Budgetary Deficit: Concept and Measurement

23.7 Implications of Budgetary Deficit

- 23.7.1 Budgetary deficit and inflation
- 23.7.2 Budgetary deficit and distribution of income
- 23.7.3 Budgetary deficit, capital formation and economic growth
- 23.7.4 Budgetary deficit and employment

23.8 Limits of Deficit Financing

23.9 Let us Sum Up

23.10 Key Concepts

23.11 Self-assessment questions

23.12 Further Readings

23.0 OBJECTIVES

This unit enables you to understand

- The importance of interdependence between fiscal and monetary policies and justification for the same in the context of a developing economy
- The techniques and methods of formulating a coordinated monetary-fiscal policy mix and its effective implementation
- The concept of budgetary deficit and its variants and different methods of deficit financing and
- To examine and evaluate the economic effects of budgetary deficits and deficit financing

23.1 INTRODUCTION

In this unit let us make an attempt to understand the importance of interdependence between fiscal and monetary policies and implications of deficit financing for the economy.

It is a known fact that like fiscal policy, monetary policy is also an important component of macro economic policy. Fiscal policy is pursued by the government, whereas monetary policy is pursued by the central monetary authority. Being instruments of macro economic policy, with more or less common objectives, these two policies should be complementary to each other.

23.2 MEANING OF COMPLEMENTARITY

Monetary policy is mainly concerned with money matters and therefore organizes and regulates currency and credit in such a way that it subserves the broad economic objectives of the country. It means that monetary policy is also concerned with the growth of the economy and contributes to the achievement of objectives of general economic policy primarily by influencing the level of aggregate demand and there by the level of money income. The other concerns are price stability, credit market and interest rate stability, international financial stability etc. In developing countries, price stability is an important function of monetary policy. In recent years it is almost identical with anti-inflation policy. It is widely used to minimize wide and violent fluctuations in the level of economic activity. The task of macro management involves a host of macro economic and sectoral policies among which monetary and fiscal policies are regarded as the prime policies.

On analytical grounds, economists usually distinguish monetary policy and banking policy. In a strict theoretical sense, monetary policy encompasses all monetary measures of the central bank which influence the cost and availability of money in the financial system of the country, while fiscal policy pertains to the finances of the government, that is the budgetary activities such as revenue, expenditure

and borrowings. Banking policy, on the other hand, addresses itself to the credit development aspects. In practice, however there is a great deal of over-lapping between monetary, banking or credit and fiscal policies and it is not easy to draw a sharp demarcation line in determining their powers, scope and impact on the working of the monetary system at large. Therefore on practical considerations the whole phenomenon is termed as monetary-fiscal policy which is a blend of several policies namely monetary cum credit or banking policy, financial policy and fiscal policy under the joint responsibility of the central bank and the fiscal authorities which together constitute monetary and financial authorities.

Monetary fiscal policy is an integral part of economic policy. It attempts to achieve the broad objectives through direct and indirect management of the monetary system and the functioning of the money economy by operating on monetary variables such as the supply of money, availability of credit, the level and structure of interest rates. It also interact with the monetary impact of the budgetary exercises of the government involving public borrowings and deficit financing.

In a wider spectrum, monetary-fiscal policy implies the complex interrelationship between the government's fiscal policy, monetary and credit policies. In a sense it is an aggregative policy and in the context of developing economies it has to assume the role of financial policy. The perception of monetary-fiscal policy is essentially based on linking fiscal with monetary measures in the analysis of government's macro-economic policies. Here all the measures are inter-related. For eg: when a budget deficit is met with deficit financing through market borrowing, it will have the effect of augmenting the money supply, the market rates of interest may tend to rise. This explains why inflationary or an expansionary fiscal policy invariably entails a high growth of money supply thereby weakening the very foundation of anti-inflationary monetary policy. To avoid such a contradictory situation there is need for monetary-fiscal policy mix particularly in the context of a planned developing economy.

23.3 NEED FOR MONETARY-FISCAL POLICY MIX

Just now we understood that both the policies using different set of variables try to influence the behaviour of aggregate demand in the economy. This policy plays a crucial role in shaping the economic destiny of the nation, because the quantum of money and finance and its allocation have profound influence on the course, nature, pattern and volume of the economic activities in the economy. Fiscal policy involves changes in taxation or government expenditure for influencing the level of aggregate demand. Similarly, an expansionary monetary policy helps in augmenting the level of aggregate demand by increasing the stock of money and lowering the interest rate. To restrain inflation, a tight money policy is required i.e., raising of interest rates and reducing the stock of money. Similarly a tight fiscal policy i.e., increase in tax rate and reduction in government spending is needed. If there is no co-ordination between these two policies, it can damage the economy by seriously disrupting its growth process.

Fiscal policy alone or monetary policy alone as a means of promoting growth and development and coping with inflation will be one sided in a broader economic structure of a developing country. This results in macro and also sectoral imbalances. To avoid this, there must be interdependence and co-ordination between these two policies.

This co-ordination means that there should not be any conflict or clash between the central monetary authority and the government. The central bank should be autonomous and use its powers effectively to manage the economy efficiently and smoothly without under political interference. The central bank's autonomy does not imply its total dependence from the government, it is only independence within the stipulated framework and interdependence of the both. The central bank should not be treated as a subordinate but as an equal partner in the decision making and executing of monetary-fiscal policy mix.

Monetary-fiscal policy is essentially the economic policy of government in the fields of monetary and financial activities. It reflects the complementary character of these policies in practice. Even the most powerful monetary or fiscal policy in isolation can never be a substitute for each other. The concept of complementarily is not merely a mutual recognition of the respective role of the central bank and government, but also an adjustment of attitudes, co-operation and co-ordination towards policy making with an integrated approach in the best interests of the economy.

Monetary-fiscal policy is fundamentally concerned with monetary management and monetary fiscal macro balances. Monetary fiscal macro balances refer to the balancing of the monetary impact of fiscal operations co-ordinated with monetary operations. The goals of monetary and fiscal policy are largely common and both are macro economic stabilization tools. Therefore, the best results can be obtained if both are co-ordinated suitably, rather than operating disjointedly where there may be chances of conflict or contradiction.

Both the policies are also interrelated because of the government budget constraint. When fiscal deficit is monetised by the net central bank credit to the government, money stock increases which is again to be controlled through device of monetary management. Similarly changes in the flow and cost of credit directly affect the volume of private investment and spending and thus real output and employment.

Regarding the duration of effects it can be said that the direct and indirect effect of monetary policy cover a long time span, whereas the average time lag for fiscal policy is somewhat shorter than that of monetary policy. Even the initial impacts of these two policies appear to be quite different.

23.4 FORMULATING A CO-ORDINATED POLICY

After examining the case for a coordinated policy now let us turn our attention towards formulation of the same. How such a policy is formulated ? What factors are taken into consideration? What are the problems of co-ordination ? What are the problems of co-ordination? Let us take up these issues now.

The policy makers should have a perception of policy co-ordination in framing a suitable monetary-fiscal policy mix. Co-ordination does not mean mere joining of two different policies or concentration of power in a single authority. It means avoidance of contradictions and conflicts by seeking mutual harmony in the policies and measures selected to achieve the common goals.

In planning co-ordinated monetary fiscal policy mix it is essential to recognize the linkage channels between these macro-economic policy instruments which are generally complex and involve long time periods. Therefore if there is no perfect co-ordination in this policy, where authorities focus on different intermediate target variables, the economy cannot be fine tuned for producing optimal results.

Another important consideration is that the elements of monetary and fiscal policy should not change, but their application must be re-oriented to the changing needs of the economy. This obviously calls for a common decision making in joint sittings of the concerned authorities. The very idea of co-ordination means that both the central bank and government enjoy some freedom, some discretionary powers within limits so that they can set the policies independently but not contradicting with the other policy.

This necessarily calls for alternative combinations and co-ordination of policy mix to make a choice of the optimal combination. However, optimal combination choice is not an easy task, because differe policy making arrangement may work out different policy combinations yielding different results to serve different purposes in different modes with varying degree of success.

Political will and determination are one of the preconditions for evolving a pragmatic monetary fiscal policy mix. But in many developing countries this is conspicuous by its absence. Usually central banks are not autonomous and subject to political pulls and pressures. Under these circumstance optimal coordinated choice of the policy mix cannot be made. Therefore it is imperative that the developing countries should consider this problem seriously and mitigate the situation through constitutional or legislative reformation.

In a developing economy the primary objective of this policy mix is development with stability and social justice. This calls for a combination of different sets of policies governing taxation, public expenditure, public debt and monetary management. This type of mix also helps to reconcile monetarism

and fiscalism the two distinct theoretical frameworks of monetary and fiscal policies on practical considerations.

Further, co-ordination in monetary fiscal policy mix calls for inter agency discussions jointly and exchange of ideas and information. This helps in designing a unified monetary-fiscal policy. Sometimes coordination on practical considerations may mean parallel expansionary and restrictive moves in monetary and fiscal policies. For eg., when a expansionary fiscal policy with a government deficit causes macro economic imbalance, it has to be corrected by a restrictive monetary policy. But to a developing country it creates some problems. A restrictive monetary policy causes an increase in credit reserve ratio and statutory liquidity ratio to regulate the growth of money supply, this will push up the interest rates. To avoid this interest Veilings are to be prescribed; this gives wrong signals and also weakens the financial system. Therefore in the context of a developing economy, strictly speaking a tight money policy is a poor substitute for fiscal discipline.

To sum up it ca be said that there is no single formula or a set of principles which provide precise and settled conclusions for framing a monetary – fiscal policy mix. There are no rigid econometric models of the policy mix. It all depends on the nature of the economy, prevailing circumstances and requirements at a particular time.

23.5 LINK BETWEEN MONETARY AND FISCAL POLICIES : THE GOVERNMENT BUDGET CONSTRAINT

This piece of information helps you in understanding the link between monetary and fiscal policies and how actions of one authority influence the actions of other authority. It also explains the implications of fiscal policy for the growth of the money supply. Let us assume that the central bank is following a monetary policy that raises interest rate. This policy automatically raises the cost of new government debt in the process of increasing government expenditure. On the other hand a fiscal policy that generates large fiscal deficits could contribute to higher interest rates.

The government budget constraint clarifies the relationship between monetary and fiscal policies. The budget constraint always explains that there are only three ways for the government to finance its spending i.e., taxation, borrowing and creation of money i.e., deficit spending.

Functionally $G = T + B + \Delta M$

where,

G	=	Government spending
T	=	Tax revenue
B	=	Government borrowing and

ΔM = The change in the money supply.

This equation can be rearranged in the following way.

$$\Delta M = (G - T) - B$$

Here M is on the left hand side of the equation. In this form we can see that the change in the money supply is equal to the change in the money supply is equal to the government fiscal deficit (G – T) borrowing. This situation is always true. In fact, an increase in the budgetary deficit of the government implies an increase in government borrowing requirement. To meet the deficit, the government has to borrow from the public and banks. As the banks acquire short term bills against their lending to the government, the assets base of the bank increases and this enables an increase in money supply. Alternatively the government may attempt to sell as much of its debt as possible outside the banking system, to the public or other financial institutions. But in order to do this if will have to increase rates in order to attract them and it will push up the market rate of interest. This will discourage private investment and consumption expenditure and result in a serious macro economic imbalance.

It means that there is a limit beyond which the government cannot finance its deficit through the public sector borrowing. Therefore inevitably a part of the deficit has to be financed using the other method i.e., printing of money.

23.6 BUDGETARY DEFICIT: CONCEPT AND MEASUREMENT

It is quite easy to say that a budgetary deficit is simply the excess of public expenditure over public revenue The use of tax and expenditure changes to promote aggregate economic goals will often help to create either a deficit or a surplus budget, usually the former. This budgetary gap is to be financed by issuing 91 days Treasury bills and running down on the government's cash balances with Treasuries and the central bank. The traditional budgetary deficit is thus equal to the sum total of net addition to treasury bill issue by the government and drawn upon from its cash balances. The budgetary deficit is thus measured as follows.

$$BD = (RE + CE + NDL) - (RR + G + DB + FB) = TB + CE$$

Where

RE = Revenue expenditure

CE = Capital expenditure

NDL = Net domestic lendings

RR = Revenue receipts

G	=	Grants
DB	=	Domestic borrowings excluding 91 days Treasury Bills
FB	=	Foreign borrowings
TB	=	91 days Treasury bills
CB	=	Governments cash balance with Treasuries and RBI.

This is an extremely narrow concept reflecting only a part of the resource gap in current fiscal operations. It is only a partial measure of fiscal imbalance. It does not indicate the governments draft on domestic savings or dependence on foreign borrowings.

The concept of budget deficit or overall-budget deficit has been given up from 1997-98 budget in India with the discontinuance of ad hoc Treasury bills and tap 91 days Treasury Bills, the concept of conventional deficit has lost relevance.

Fiscal Deficit

In simple terms, fiscal deficit is budgetary deficit plus market borrowings and other liabilities of the government. i.e.,

Fiscal Deficit = Revenue Receipt (Net tax revenue + Non-tax revenue) + Capital receipts (only recoveries of loans and other receipts) – Total expenditure (Plan and non-plan)

OR

Fiscal Deficit = Budget deficit + Government market borrowings and liabilities

In addition to this there are various variants of budgetary deficit like net fiscal deficit, primary deficit, net primary deficit, monetised deficit, structural deficit, operational deficit etc. Of course, any budgetary deficit results from reduced tax revenue and higher government spending. In Keynesian terms, this deficit involves the multiplier effect. Once these multiplier effects are set in motion, the particular means of financing a deficit assumes considerable importance, because of its ability to exert secondary economic effects.

Generally there are five alternative methods of financing a federal deficit budget.

1. The Treasury department sells securities to the private sector (excluding commercial banks).
2. The treasury department sells securities to commercial banks when they do not have excess loanable reserves

3. The treasury department sells securities to commercial banks at a time when they do possess substantial excess reserves
4. The treasury department sells securities to the nation's central bank
5. The government creates or prints money

V.K.R.V. Rao defines deficit financing as "the financing of a deliberately created gap between public revenue and expenditure or a budgetary deficit, the method of financing resorted to being or a type that results in a net addition to national outlay or aggregate expenditure". Thus deficit financing implies the creation of additional money supply.

The term deficit financing means an increase in the purchasing power of the community. However, deficit financing needs to be distinguished from deficit budgeting. Deficit budgeting refers to the budgetary phenomenon in which the public expenditure in current account exceeds the current revenue without taking into account receipts on capital account. While the measure adopted to finance the gap is called deficit financing.

In addition to this the technique of deficit financing is normally resorted to by a government for the following purposes.

- To meet enormous defence expenditure during war period
- To subdue depressionary effects and solve the problem of unemployment through recovery set by compensatory financing
- To raise the level of effective demand and stimulate private investment
- To promote economic development and raise national income by ensuring productive utilization of the available resources
- To effect forced savings by garnering resources from consumption goods industries and mobilize them for capital formation,
- To mobilize resources for financing economic plans etc.

In this way, in different countries for different purposes at different times deficit financing is used.

23.7 IMPLICATIONS OF BUDGETARY DEFICIT

Budgetary deficit and consequential deficit financing have several economic implications. Same of them are listed below

1. Budgetary deficit and inflation
2. Budgetary deficit and distribution of income

3. Budgetary deficit and capital formation and economic growth
4. Budgetary deficit and employment

23.7.1 Budgetary deficit and inflation

It is commonly held that deficit financing may lead to an inflationary rise in prices, because it increases the money supply, volume of spending and therefore aggregate demand with output in real terms not rising as far as the rise in money, inflationary pressures are created. Assuming that the government covers up deficit budget either by borrowing from the central bank, in any event it creates new money. This newly created state money evidently forms the basis of credit creation by banks, leading to an increase in total money supply in a greater proportion than the budgetary deficit. Therefore, its impact on general prices will tend to be much more powerful.

However, much of the impact depends on the nature of deficit financing. An unproductive finance will lead to inflation. But developmental deficit financing may not always be inflationary and distorting. Because it augments production and aggregate supply in future and therefore its inflationary effect is neutralized over a period due to the expansion of output. There is also an argument that inflation in mild doses is conducive for economic development.

However, an inflationary price spiral necessarily follows deficit financing because of excessive consumption, unproductive expenditure, supply rigidities etc. Therefore a persistent and heavy deficit financing policy is a threat to price stability.

23.7.2 Budgetary Deficits and Distribution of Income

From an egalitarian point of view, deficit financing tends to produce an unhealthy effect on the distribution of income, as it widens inequalities. Since deficit financing causes excess monetary demand in the economy, general price tends to rise. This provides adequate incentives to producers to produce more. Now their profits tend to rise on account of higher prices, but the real incomes of the wage earning classes decline. As a result now income and wealth is redistributed in favour of the profiteer class with rise in prices, the richer sections with fast rising incomes, can maintain or raise their consumption. But the poorer sections whose money income does not rise are forced to reduce their consumption. Thus it distributes the burden of development inequitably with heavy tilt against poorer sections. Thus resorting to heavy deficit financing is harmful and detrimental to the realization of the objective i.e., distributive justice.

23.7.3 Budgetary Deficit, Capital Formation and Economic Growth

Theoretically, deficit financing has been a significant source of finance for plans, as the savings and the foreign capital have often fall short of the financial requirements. When poor countries are not able to mobilize enough resources from taxes, internal and external borrowings and there are development projects crying for funds, governments find this instrument handy. As compared to additional taxation, deficit financing is regarded as an easier and more alternative method as it provokes no public resentment and less opposition in a democratic set up. Another argument is that when income is redistributed in favour of entrepreneurial class as prices rise faster than wages, the aggregate savings rise because this class has a high propensity to save and the same can be utilized for capital formation and economic development. Even the forced savings that accrue because of the inflationary impact of deficit financing can be a source of capital formation.

However, in reality savings and capital formation in real terms are affected. Because of rising prices, people tend to save less and therefore savings from the household sector tend to decline. Further inflationary prices and consequential increase in taxes distort and affect all incentives for labour supply, capital and other factors of production and therefore affect the behaviour of aggregate. Inflation induced tax rate hikes and increase in the total cost of production lead to cost pash inflation. As a result economy faces a phenomenon of stagflation where output, employment and other crucial variables remain constant, but prices tend to rise continuously. Now almost all developing countries are experiencing stagflation and are struggling hard to overcome the situation.

23.7.4 Budgetary Deficit and Employment

The technique of deficit financing was advocated by Keynes as an important means of curing involuntary unemployment. It is thought that programme of public spendings financed through deficit financing tends to produce a larges expansionary effect due to operation of multiplier process. This may be all right for an advanced country which is in a depression. But the theory has little applicability in the case of underdeveloped countries. Economics of depression and economics of growth cannot be the same. In a developing country the nature and magnitude of unemployment are quite different from that of an advanced economy. Here the challenge is that in the growth process employment opportunities have to be created and sustained and it should contribute to economic development. Therefore an increase in effective demand caused by deficit financing fails to bring about a permanent increase in the volume of employment and output.

23.8 LIMITS OF DEFICIT FINANCING

After examining the evil consequences of unregulated and persistent budgetary deficits we have come to the conclusion that it should be regulated and moderate in the volume. Generally the LDCs have strong temptation to resort to deficit financing. There fore it is absolutely necessary to fix a safe limit to deficit financing. Tolerable limit of deficit spending is indicative of the stage beyond which its illeffects overshadow its benefits. It is difficult to estimate this level, because it is related to economic conditions. Further, the safe limit depends upon the way in which a deficit is financed.

Current thinking supports the thesis that inflation is mainly caused by deficit spending and can be cured only through budgetary reforms. Also, deficit spending is a self feeding process with price rise, government expenditure rises faster than its revenue and government is forced to resort to bigger deficits. Deficits cannot be sustained on a prolonged basis without damaging the economy. Therefore it is imperative that the governments have to scale down budgetary deficits and should be extremely cautious while selecting the means of deficit financing.

23.9 LET US SUM UP

- Fiscal and monetary policies are the instruments of macro economic policy and have common objectives. Therefore they should be complementary to each other.
- In a wider spectrum monetary – fiscal policy mix implies the complex inter-relationships between fiscal, monetary and credit policies. It links fiscal measures with monetary measures in the analysis of micro economic policy.
- In the context of a developing economy this type of co-ordination and interdependency is absolutely necessary because fiscal or monetary policy alone even if it is pursued rigorously may result in sectoral and macro imbalances.
- Formulation of an integrated monetary – fiscal policy is not an easy job. There are no precise conclusions and models which can provide a definite framework for the policy mix. It depends on the nature of the economy, prevailing situations and requirements of the hour.
- Persistent and huge budgetary deficits are a serious problem of developing countries. Mismatch between total receipts and expenditures has led to budgetary deficits.
- Deficit management and methods of deficit financing have several far reaching adverse implications for the economy.
- It is imperative that governments should reduce budgetary deficits and should be very cautious while selecting the methods of deficit financing.

23.10 KEY CONCEPTS

1) Stagflation: The situation where a country persistently suffers from both high inflation and unemployment.

2) Treasury Bills: A short-dated government security. Treasury bills bear no formal interest, but are promises to pay in 91 days time.

3) Monetised Deficit: Level of support extended by the central bank to the borrowing programme of the government.

4) Structural Deficit: When the borrowing requirements of the public sector is adjusted for occasional or temporary measures for reducing deficit and raising resources, it is termed structural deficit.

5) Operational Deficit: Public sector borrowing requirements adjusted for inflationary price rise gives us operational deficit. Obviously for arriving at operational deficit. choice of an appropriate price index is of great relevance.

6) Aggregate Demand: Aggregate demand is the sum of the demands for current output by each of the buying sectors of the economy i.e., households, businesses, the government and foreign trade sector.

23.11 SELF-ASSESSMENT QUESTIONS

1) Justify the need for complementarity between monetary and fiscal policies.
2) Discuss the methods and techniques of formulating an integrated monetary -fiscal policy mix.
3) Explain the concept of budgetary deficit? What are its variants?
4) Give an account of the economic effects of budgetary deficits.

23.12 FURTHER READINGS

1) Musgrave R and Musgrave P " Public Finance in theory and practice," Mc.Grow Hill, 1995.
2) B.N.Ghosh. " From market failure to government failure Wisdom house 2001.
3) D.M.Mithani, " Modern public finance," Himalaya Publishing House, 1998
4) K.P.M.Sundaram and K.K.Audley, " Public Finance" Theory and Practice ; S.Chand and company, 2001
5) Barnard P.Herber, " Modern public finance Richard D. Irwria 1994.
6) John F. Due and Aan F.Fried laender, " Government Finance : Economics of the Public sector " A.I.T.B.S. Publishers, 1997.
7) Samepat Mukherjee, "Simple analytics of public finance," Books and allied, 2000.
8) R.K.Lekhi, " Public Finance" Kalyani Publishers, 2002

UNIT 24 FISCAL POLICY AND STABILISATION

24.0 Objectives

24.1 Introduction

24.2 Multiplier Models with Investment Fixed

24.2.1 Income Determination without Budget

24.2.2 Income Determination with Budget

24.2.3 Impact of Taxes on Income

24.2.4 Role of Transfer Payment

24.3 Balanced Budget Multiplier

24.4 Multiplier Models with Investment Variable

24.5 Stabilization and Policy Mix

24.6 Aggregate Fiscal Policy Instrument

24.6.1 Automatic Fiscal Stabilizers

24.6.2 Discretionary Fiscal Stabilizers

24.7 Need for a comprehensive and Flexible Policy

24.8 Let Us Sum Up

24.9 Key concepts

24.10 Self assessment questions

24.11 Further Readings

24.0 OBJECTIVES

This unit will enable you to understand the following aspects

- The effects of fiscal policy on the level of aggregate demand and income and output
- Introduction of fiscal policy instruments and alteration in the same and their multiplier effects on income and output
- The working of automatic and discretionary fiscal stabilizers and their stabilizing impact on the economy
- Distinction between fiscal changes which involve changes in fiscal instruments and others which reflect the response of other parameters to these changes and
- Need for a comprehensive and flexible stabllization policy with an appropriate combination of fiscal and monetary policy measures

24.1 INTRODUCTION

We know that budget operations influence the level of aggregate demand and these changes in the level of aggregate demand have implications for employment and economic stability. It means that the government can use fiscal policy instruments to stabilize the behaviour of and functional relationsship between crucial macro economic variables. Moreover, budget policy affects the division of total output between consumption and capital formation and thereby the rate of economic growth. This unit explores this set of inter relations.

24.2 MULTIPLIER MODELS WITH INVESTMENT FIXED

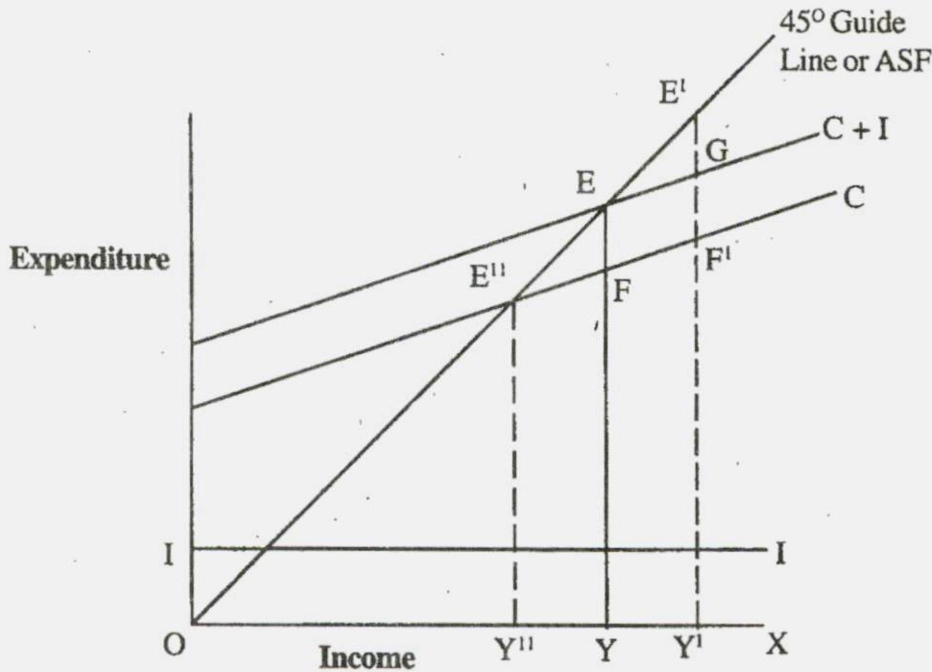
Let us begin with a simple two sector model with only two variables i.e., consumption and investment. We assume that consumption is a function of income and investment is given. There is no government sector and therefore taxes and transfer payments.

24.2.1 Income Determination without Budget

Let us examine how equilibrium income is determined in the absence of government sector.

In the diagram income is measured along the horizontal axis and expenditure (consumption) are measured along the vertical axis. CC is the consumption function, showing consumption expenditure to be a rising function of the level of income. Investment expenditure are given as shown as II. They are assumed to be constant and independent of the level of income. By adding II and CC vertically, we obtain the total expenditure line C + I. Equilibrium income is determined where the aggregate demand

function made up of consumption and investment expenditure intersect 45 degree guide line. In the diagram this intersection has occurred at point E where the corresponding equilibrium level of income is Y. At this level of Y, consumption expenditure is YF and saving i.e., investment is FE.



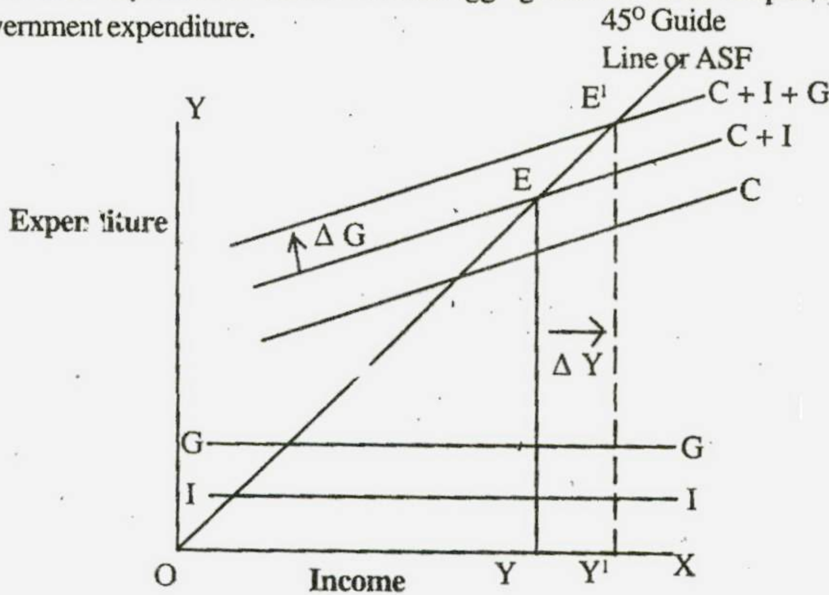
In equilibrium, expenditures must equal income so that saving must be matched by investment spending. At point E, expenditure i.e., aggregate demand is greater than aggregate supply. It means that there are opportunities to increase income and output to OY. Similarly at E^{I}, total expenditure i.e., aggregate demand is insufficient to purchase the output i.e., C + I schedule lies below the aggregate supply function i.e., 45 degree guide line. At this point savings i.e., E^{I}F^{I} is greater than investment. Therefore income must fall until saving is reduced to F^{I}G. Thus income should return to its original level i.e., OY. In this model there is no automatic mechanism which ensures restoration and maintenance of full employment.

24.2.2 Income Determination with Budget

Now let us introduce government into the system and examine its impact i.e., influence of budget policies on the level of income.

To start with let us assume that there is only one fiscal measure i.e., G and it is added to total expenditure to derive at aggregate demand function i.e., C + I + G . Introduction of government expenditure thus raises equilibrium income and output from OY to OY^{I}. In the absence of government expenditure, equilibrium income would have been OY, because aggregate demand made up of consumption

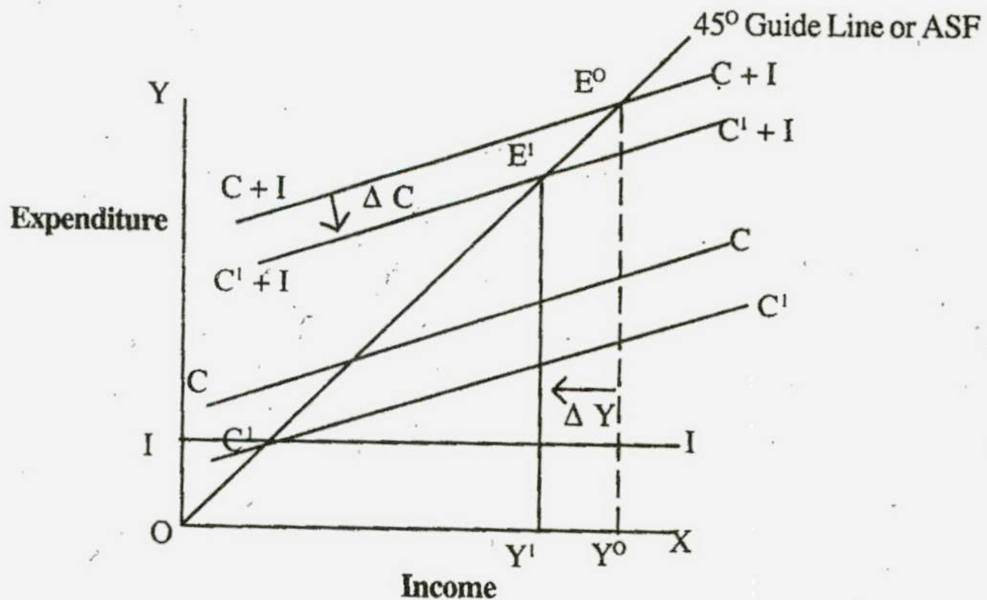
and investment expenditure is lesser than the aggregate demand made up of consumption, investment and government expenditure.



It is due to the operation of multiplier. The greater the value of multiplier, the greater would be the increase in income and output. The same holds but with reversed signs for a decrease in government expenditure.

24.2.3 Impact of Taxes on Income

Now let us consider the operation of another fiscal variable i.e., taxes. Let us assume that taxation is first introduced in the form of a lump sum tax i.e, a tax of fixed amount independent of income.



As usual adding II and CC, we obtain C + I schedule. This schedule intersects aggregate supply schedule at point E degree and therefore corresponding equilibrium income is Yo. Now let us assume that the government has imposed a lump sum tax at all income levels. As a result consumption function drops from CC to $C^{1}C^{1}$. Now the new aggregate demand schedule with less consumption expenditure is $C^{1} + I$. It lies below the original aggregate demand schedule C + I. The C1 + I schedule has intersected aggregate supply schedule i.e., 45° guide line at point E^{1} where the equilibrium income is equal to OY^{1}. In this way as a result of tax imposition, aggregate demand declines causing a drop in the equilibrium income.

Similarly a reduction in tax will raise consumption and aggregate demand and thereby the levels of income and output. However, there is an important difference between the operation of G and operation of T^{1} variable. Since G is autonomous, it raises aggregate demand to the extent of government spending. But T influences the aggregate demand via marginal propensity to consume. For e.g. government purchase of $ 25bn at all income levels. But imposition of tax to the tune of $ 25bn does not reduce consumption by the same amount, but less than it depending on the value of marginal propensity to consume.

24.2.4 Role of Transfer Payments

Transfer payments, as distinct from government expenditure (G) may be viewed as negative taxes for purposes of this analysis. Whenever there are transfer payments, there will be an increase in aggregate demand, because they raise current consumption expenditure via marginal propensity to consume. Since transfer payments are not autonomous the extent of increase in aggregate demand and resulting change in income is less than that for an increase in government expenditure. It is also observed that a part of the increase in disposable income due to the transfer payment will be reflected in increased saving rather than in increased consumption expenditure.

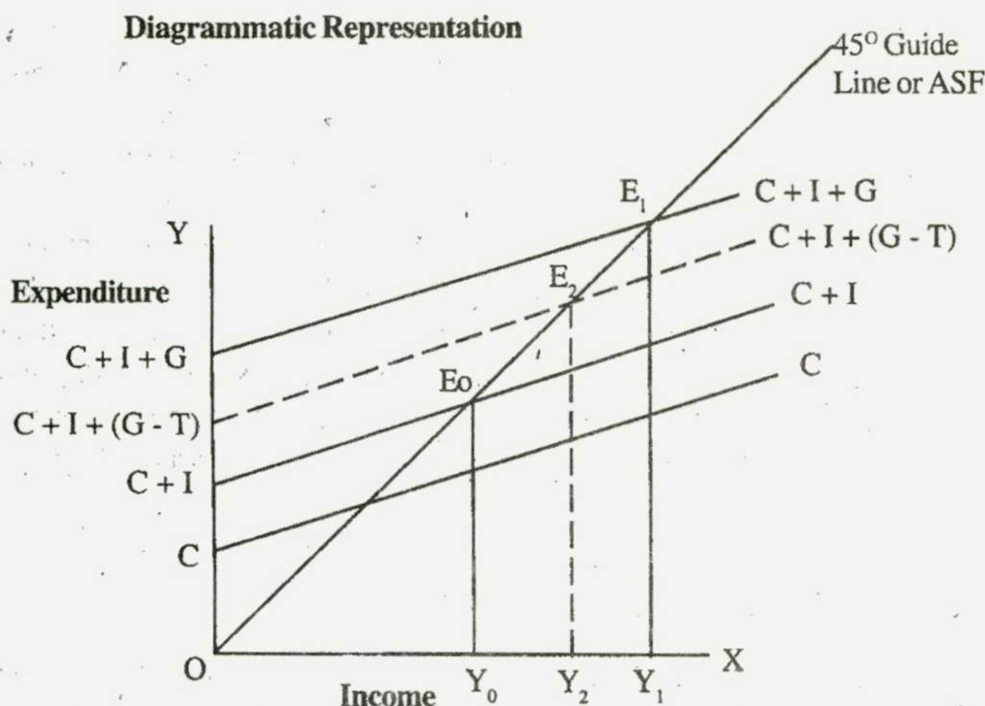
Now let us proceed further and examine the working of balanced budget multiplier. Hitherto we examined the working of G and T in isolation. Now let us simultaneously introduce G and T and suppose that G is exactly equal to T i.e., what the government injects to the economy in the form of G is exactly equal to withdrawal from the economy in the form of T. The impact of the simultaneous operation of G and T can be explained with the help of balanced budget multiplier.

24.3 BALANCED BUDGET MULTIPLIER

It is argued that even a balanced budget exerts a direct impact on income and employment in the economy in addition to its possible repercussions on the allocative effects. The first formulation of this theory was developed in the wake of Keynesian analysis. It maintained that any increase in government expenditure, even though fullty matched by taxation, leads to an equivalent increase in national income.

Now the question i.e that even though government expenditure is exactly equal to taxation, how come that there will be an increase in equilibrium income.

Diagrammatic Representation



Here we have assumed that government spending is $ 25bn and taxation is also to the tune of $ 25 bn . This lump-sum tax reduces the community's income and amount to public saving of $ 25 bn. It affects the level of consumption and causes a fall in the aggregate demand. As a result equilibrium is disturbed and new equilibrium is established at Y2 level of income. In the absence of taxation, with C + I + G, equilibrium had secured at a higher level of income i.e., Y^1 .

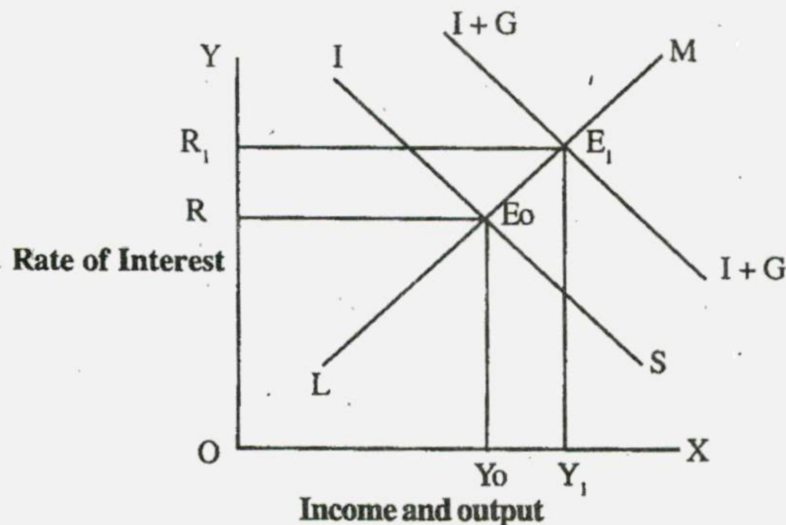
: is surprising to see that the injection of $ 25bn of G into the income stream and the withdrawal of taxes of an exactly equal amount still results in an expansion of income from Y_0 to Y_2. The reason is that the decrease in aggregate demand caused by the imposition of tax is less than the increase in aggregate demand caused by the increase in government expenditure. Taxes reduced consumption not by $ 25 bn, but by $ 18.75 bn whereas government expenditure raised the level of aggregate demand by $ 25 bn. The difference between the increase in aggregate demand and decline in aggregate demand is $ 6.25 bn. When it is subjected to a multiplier, depending on the value of multiplier there will be an increase in the equilibrium level of income and output.

On this ground Keynes argued that state intervention necessarily raises the equilibrium level of income and output.

This illustration has revealed that a balanced budget does not necessary have a neutral effect on the economy. Generally we presume that when the budget is balanced, fiscal policy is neutral. But this has shown that even though G and T are exactly equal, still there would be a raise in the equilibrium income and output.

24.4 Multiplier Models with Investment Variable

For a more realistic understanding of the income determination process, let as assume that private investment i.e., I as an endogenous variable determined within the system rather than given from outside. It is further assumed that investment is dependent upon the rate of return and interest.



In the diagram along the OX axis we measure income and output and along the OY axis we measure the interest rate. At point Eo, there is intersection between IS and LM schedules and therefore equilibrium income is OY and equilibrium rate of interest is OR. Let us introduce a fiscal variable into the system and see how it raises the level of income. Let us introduce government purchases, when added horizontally to the IS schedule it gives us I + G schedule and it intersects LM schedule at a higher level of income. As income increases, transactions demand for money increases, thus raising the interest rate and depressing investment in the next period. This reduction in private investment due to hike in the interest rate is known as "crowding out effect". If this happens in the next period income decreases due to the reverse working of investment multiplier. Hence suitable changes in the interest rate and money supply via monetary policy are called for.

24.5 STABILISATION AND POLICY MIX

In practice, both policies may be used in combination and the same level of aggregate demand may be secured by various mixes of fiscal and monetary expansion. The choice of mix is important both in the short run and long run. Here the choice matter because it affects the division of output between consumption and investment and hence the rate of capital formation and economic growth.

24.6 AGGREGATE FISCAL POLICY INSTRUMENTS

The basic Keynesian explanation of macro economic malperfomance focuses on deficient or excessive aggregate demand as the primary culprit. Consequently, it also emphasizes "demand – side" policies in its instruments for correcting such malperformance. These demand – side fiscal policy instruments involve the working of multiplier. When the government alters expenditure or taxes, the resulting shift in aggregate demand can be larger or smaller than the fiscal change. The multiplier effect tends to amplify the effects of fiscal policy on aggregate demand. Savings, tax and import leakages are considered as limitations to the value of the multiplier. Savings, tax revenue and import purchases all assume a functional relationship with the level of income.

Fiscal policy involves the classification of budgetary instrument into automatic and discretionary fiscal stabilizers. They are used in the evaluation of the stabilization performance of the policy.

24.6.1 Automatic Fiscal Stabilizers

An automatic fiscal stabilizer is designed to function in a counter cyclical fashion to improve the performance of the economy, without the necessity of ad hoc adjustments in response to an immediate macroeconomic problem. The graduated personal income tax with a given rate and base structure automatically withdraws revenues from the private sector more rapidly than income increases during a boom, thus causing a net reduction in purchasing power in the private sector. Conversely, it will lag behind a decrease in income during a depression, thus causing a net increment in private sector purchasing power. It is the elastic income elasticity characteristic of the tax which provides this quality of an automatic stabilizer.

All economists both advocates and critics of stabilization policy agree that the lags in implementation render policy less useful as a tool for short run stabilization. The economy would be more stable, if policymakers could find a way to avoid some of these lags. They are automatic stabilizers. These refer to changes in fiscal policy that stimulate aggregate demand when the economy goes into a recession without policymakers having to take any deliberate action.

The most important automatic stabilizers are tax system and government spending. For eg when there is a recession and resultant unemployment in the economy many people apply for insurance benefits, welfare benefits and other forms of income support. This automatic increase in government spending stimulates aggregate demand at exactly the time when aggregate demand is insufficient to maintain full employment.

However automatic stabilizers are not sufficiently strong to prevent fluctuations completely. Nonetheless, without these automatic stabilizers, output and employment would probably he more volatile than they are. For this season many economists oppose a balanced budget. In a strictly balance budget, government has to take deliberate policy measures to alter taxes and spending according to the changing environment. In other words, a strict balanced budget rule would eliminate the automatic stabilizers inherent in our current system of taxes and government spending.

24.6.2 Discretionary Fiscal Stabilisers :

A discretionary fiscal stabilizer refers to a direct budgetary change responding in an adhoc fashion to a presently recognized macro economic problem. For eg: a reduction in personal income tax rates in response to a depressed economy. It means that in addition to automatic stabilizers, stabilization policy may also involve the deliberate, adhoc alteration of taxes and expenditures, so as to achieve aggregate economic goals. Such activities are called as discretionary fiscal stabilizers.

Deliberate changes in either tax rates or tax bases, or the adoption or deletion of a tax, or deliberate changes in governmental spending, or in both taxes and spending, can be rationally directed toward the improvement of the aggregate performance of the economy in terms of full employment and price stability. These discretionary fiscal stabilizers have a demand-side orientation.

From this discussion it is imperative that in the implementation of fiscal policy, there should be provision for built-in-flexibility to accommodate changes in fiscal policy instruments in accordance with the requirements. An improvement justification for this is that, the decision making process in the area of fiscal policy involves in the area of the executive and legislative branches. It means that fiscal policy cannot be designed in a political vacuum and there could be administrative and political delays in decision making. Under these circumstances built-in-flexibility is needed. Built-in-flexibility and stability is achieved when changes in tax collections and spendings vary automatically and correctly in the right direction to produce a stabilizing effect on aggregate demand. It requires no specific action. The flexibility provides appropriately timed helpful fiscal response to recessionary and inflationary developments.

Many economists believe that there should be little time lag between changes in fiscal instruments and changes in aggregate demand. It is called promptness. If the desired effects come about too slowly, economic conditions may have changed in the meantime and the initial policy may no longer be appropriate. Moreover, depending on lags in the responses of consumers and firms, a fiscal change may give rise to continuous movement rather than lead to a new equilibrium position. It is true that analysis of the comparative statics type is useful to bring out certain relationships, but it does not provide a realistic model on which to base actual policy.

In short economists believe and experiences have shown that variations in government purchases, transfer payments and tax receipts can be used in various combinations to produce the desired expansionary or contractionary effects on aggregate demand and level of income, output and employment.

24.7 THE NEED FOR A COMPREHENSIVE AND FLEXIBLE POLICY

The effectiveness of budgetary policy in achieving desired changes in economic activity is now generally recognized. The level of activity depends upon the aggregate demand which in turn depends on the income and aggregate spending of the community. All these variables can be influenced by the government through budgetary manipulations.

Fiscal actions by the government involve changes in fiscal parameters and also changes in other crucial variables like private investment, consumption, savings, income, employment, output etc. That is primary changes in fiscal variables are known as direct changes and changes in other variables via taxation and expenditure are known as indirect changes. To produce the desired impact on the economy the policy should be comprehensive, flexible and should include automatic and discretionary changes. To ensure automatic economic stabilization coordinated use of fiscal and monetary policy is desirable. Further, both demand-side and supply-side instruments can be simultaneously used in appropriate combination. The need for such a coordinated policy is also indicated by the various stabilization policy lags.

This unit has illustrated the role of fiscal stabilization policy in managing aggregate demand to cushion equilibrium output from shifts in the unstable demand. However a group of economists disagree about how active the government should be in this effort. They argue that the stabilization policy works with long lags, at the end of the large period, the policy measures instead of stabilizing the economy often end up being de-stabiling

24.8 LET US SUM UP

- Fiscal policy has a definite impact on aggregate demand and therefore equilibrium income and output.
- Fiscal actions by the government involve changes in fiscal variables and also other variables like private investment, consumption, savings income, capital formation etc.
- Fiscal and monetary policy measures can be used in various combinations to produce the desired expansionary or contractionary effects.
- To perform its stabilization responsibility efficiently. The policy should include automatic and discretionary fiscal stabilizers.

- To be more effective, the policy should possess the character of built-in-flexibility. It allows changes in tax collections and spending to vary in the right direction to produce a stabilizing effect on aggregate demand.
- The working of balanced budget multiplier has revealed that though G and T are exactly equal in amount, still cause an increase in the equilibrium level of income.
- The stabilization effect of fiscal policy also depends on timely and appropriate monetary policy actions. A favourable fix of these two policies is indispensable to achieve the goal of economic stabilization.

24.9 KEY CONCEPTS

1) Transfer Payments

Payments of income which are not a return for the provision of current factor services. For many countries the state makes large scale transfer payments, particularly to pensioners, the disabled and the unemployed. These payments transfer purchasing power and spending from one group of people to the other.

2) Marginal propensity to consume (MPC)

The additional increase or decrease in consumption as a result of an increase or decrease in disposable personal income. The MPC is normally less than 1.

3) Time Lags :

The delay, both in the real world economy and in economic models, of actions after the events which are believed to have caused them. Time lags arise in several ways and they are extremely common.

4) Lump –Sum Tax

Fixed sum that a person would pay as a tax each year, independent of that persons income, consumption of goods and services, or wealth.

5) Crowding out effects

The effect in aggregate demand that results when expansionary fiscal policy raises the interest rate and thereby reduces investment spending.

6) Inflation

A continuous increase in the overall level of prices in the economy.

24.9 SELF-ASSESSMENT QUESTIONS

1) Describe the following stabilisation principles under
   (a) Multiplier models with fixed investment and
   (b) Multiplier models with variables investment.
2) Explain the working of balanced budget multiplier.
3) Make out a case for built-in-flexibility in the implementation of fiscal policy.
4) Distinguish between automatic and discretionary fiscal stabilisers. Justify their importance in fiscal stabilization programme.
5) Explain the appropriate role of monetary and fiscal policy instruments in the conduct of fiscal stabilization programme.

24.10 FURTHER READINGS

1) Musgrave R and Musgrave P, "Public Finance in Theory and Practice", Mc. Graw Hill, 1995.
2) B.N. Ghosh, "From Market Failure to Government Failure", Wisdom House, 2001.
3) D.M. Mithani, "Modern Public Finance", Himalaya Publishing House, 1998.
4) K.P.M. Sundaram and K. K. Andley, "Public Finance : Theory and Practise", S. Chand and Company 2001.
5) Bernard .P. Herber, "Modern Public Finance", Richard D. Irwin, 1994.
6) John F. Dae and Ann F. Friedlaender, "Government Finance, Economics of the Public Sector", A.I.T.B.S Publishers, 1997.
7) Samphat Mukherjee, "Simple Analyties of Public Finance", Books and Allied, 2000.
8) R.K. Lekhi, "Public Finance", Kalyani Publishers, 2002.
9) N. Gregory Mankiw, "Macroeconomics : Theories and Policies", Macmillan Publishing Company, 1993.
10) Richard T. Froyen - Macro Economics, Theories and Policies. Macmillan Publishing Company 1993.

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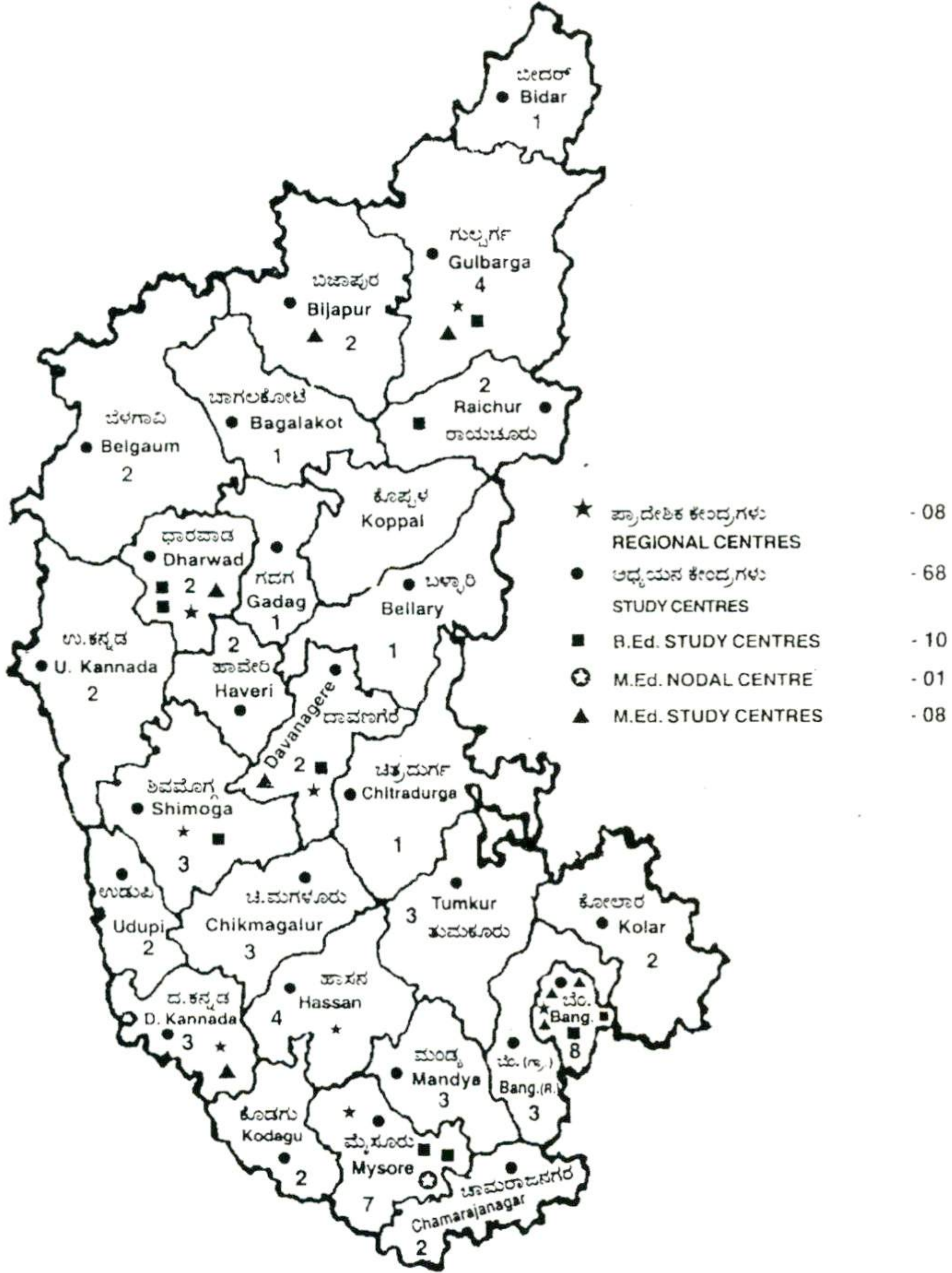

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Feedback : improvement, revision and launching of new programmes
Multimedia learning material
Self-instructional print material
Electronic media learning component
Academic and other support
Optional
Obligatory
Evaluation - methods and modes
Continuous evaluation
Unsystematic Feedback
Systematic feedback
STUDENT
INSTRUCTIONAL SYSTEM