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Rajiv Gandhi University

MAECO-407

Public Finance –II

MA ECONOMICS

2nd Semester

Rajiv Gandhi University

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PUBLIC FINANCE - II

MA [Economics]

Second Semester

MAECO-407

RAJIV GANDHI UNIVERSITY

Arunachal Pradesh, INDIA - 791 112

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About the University

Rajiv Gandhi University (formerly Arunachal University) is a premier institution for higher education in the state of Arunachal Pradesh and has completed twenty-five years of its existence. Late Smt. Indira Gandhi, the then Prime Minister of India, laid the foundation stone of the university on 4th February, 1984 at Rono Hills, where the present campus is located.

Ever since its inception, the university has been trying to achieve excellence and fulfill the objectives as envisaged in the University Act. The university received academic recognition under Section 2(f) from the University Grants Commission on 28th March, 1985 and started functioning from 1st April, 1985. It got financial recognition under section 12-B of the UGC on 25th March, 1994. Since then Rajiv Gandhi University, (then Arunachal University) has carved a niche for itself in the educational scenario of the country following its selection as a University with potential for excellence by a high-level expert committee of the University Grants Commission from among universities in India.

The University was converted into a Central University with effect from 9th April, 2007 as per notification of the Ministry of Human Resource Development, Government of India.

The University is located atop Rono Hills on a picturesque tableland of 302 acres overlooking the river Dikrong. It is 6.5 km from the National Highway 52-A and 25 km from Itanagar, the State capital. The campus is linked with the National Highway by the Dikrong bridge.

The teaching and research programmes of the University are designed with a view to play a positive role in the socio-economic and cultural development of the State. The University offers Undergraduate, Post-graduate, M.Phil and Ph.D. programmes. The Department of Education also offers the B.Ed. programme.

There are fifteen colleges affiliated to the University. The University has been extending educational facilities to students from the neighbouring states, particularly Assam. The strength of students in different departments of the University and in affiliated colleges has been steadily increasing.

The faculty members have been actively engaged in research activities with financial support from UGC and other funding agencies. Since inception, a number of proposals on research projects have been sanctioned by various funding agencies to the University. Various departments have organized numerous seminars, workshops and conferences. Many faculty members have participated in national and international conferences and seminars held within the country and abroad. Eminent scholars and distinguished personalities have visited the University and delivered lectures on various disciplines.

The academic year 2000-2001 was a year of consolidation for the University. The switch over from the annual to the semester system took off smoothly and the performance of the students registered a marked improvement. Various syllabi designed by Boards of Post-graduate Studies (BPGS) have been implemented. VSAT facility installed by the ERNET India, New Delhi under the UGC-Infonet program, provides Internet access.

In spite of infrastructural constraints, the University has been maintaining its academic excellence. The University has strictly adhered to the academic calendar, conducted the examinations and declared the results on time. The students from the University have found placements not only in State and Central Government Services, but also in various institutions, industries and organizations. Many students have emerged successful in the National Eligibility Test (NET).

Since inception, the University has made significant progress in teaching, research, innovations in curriculum development and developing infrastructure.

SYLLABI-BOOK MAPPING TABLE

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Syllabi	Mapping in Book
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Unit II: Public Debt Differences between private debt and public debt; Sources of government borrowing; effects of public debt; Ricardian equivalence; burden of public debt; Domar's model management of public debt.	**Unit II:** Public Debt (**Pages 173-196)**
Unit III: Fiscal Policy in a Closed Economy Instruments of fiscal policy: tax, borrowing and expenditure, anticyclical fiscal policy in a closed economy. Crowding-out effects of government expenditure, it criticisms.	**Unit III:** Fiscal Policy in a Closed Economy (**Pages 197-210)**
Unit IV: Fiscal Policy in an Open Economy Relation between fiscal, monetary & exchange rate policies. Deficit spending and its effect on money stock, exchange rate, export, import and capital movement. Changes in tax rate and its effect on the movement of foreign capital.	**Unit IV:** Fiscal Policy in an Open Economy (**Pages 211-226)**
Unit V: Fiscal Federalism Principles of division of financial resources in a federation – horizontal and vertical imbalance – Finance Commission and Planning Commission in resources transfer from centre to the states in India.	**Unit V:** Fiscal Federalism (**Pages 227-246)**

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3.1 Introduction

In the modern times, government plays an important role in regulating economic activities and promoting economic development. The government can influence the level of economic activities and attempt achieves the desired level of output and employment through the use of public budget and public debt. The classical economists were in favour of having balanced budget. But in modern times, public budget has been regarded as an important instrument through which the government can overcome the problem of inflation and deflation. Hence, the economic situation that the country is facing will decide whether the budget will be a balanced, deficit or surplus budget. Whenever, the expenditure of the government exceeds its revenue, the government resorts to borrowing to finance the gap between the revenue and the expenditure. The borrowings of fund by the government create liabilities and repayment obligations which is termed as public debt. Since, the borrowed fund has to be repaid along with the interest charges, there is a need for judicious use of the fund and proper management of the public debt such that there is a sustainability of debt and a sound fiscal health of the government is maintained. Therefore, this unit is devoted to the understanding of issues related to public budget and public debt.

3.2 Objectives

The objective of this module is to impart the knowledge of various methods of formulation of public budget,

concepts deficit in public budget and their significance. It also aims to acquaint the public debt to the students about the concept of public debt, effects, burden and management of public debt.

3.3 Incremental and Zero-based Budgeting

The term budget is derived from the French word 'Bougette' which means a small leather bag or pouch. The phrase was first used in 1773 in England for the bag of proposals the Chancellor carried to the parliament for approval. There has been long struggle for having control over the purse i.e. taxation. The control over expenditure came much later and as by product of the concern for the protection of tax payers and expanding activities or functions of the government. Nowadays, budget is defined as a statement of revenue and expenditure of the government for a period of one year (financial year) with the adjustment of one to the other. The budget formulation and preparation involves the process of estimation of revenue and expenditure. On the basis of method of preparation, budget can be classified as incremental budget and zero-based budget.

3.3.1 Incremental Budgeting

Incremental budgeting refers to the conventional method of preparation of budget. It is a technique of formulation of the public budget for the incoming year on the assumption that the items of the budget for the outgoing years are to be retained with or without some marginal changes. In this method, substantial changes in the tax system, expenditure and public debt policy are not undertaken. Under this system a new budget is prepared by taking the previous year's budget as the base. In this method, the past levels of expenditure are taken as given and only new additions to or subtractions are made from the past outlays to arrive at the new budget. The allocation of resources is based upon allocations from the previous period's budget. This system of budgeting is largely a revision of the previous budget. In this method of budgeting, the changes are proposed only for few items rather than on every aspects of the whole programme structure. Thus, when the new budget is prepared by following the incremental approach the resulting budget is called the incremental budget.

Advantages of Incremental Budgeting

1. The budget is stable and change is gradual.
2. The managers can operate their departments on a consistent basis.
3. The system is relatively simple to operate and easy to understand. The process involves simple and straight forward calculation.
4. In this system of budgeting, all the departments are treated in a similar manner and so it can help to mitigate conflicts among the departments.
5. It can ensure coordination between the budgets.
6. In this system of budgeting, the impact of change can be observed immediately.

Disadvantages of Incremental Budgeting

1. It assumes that the activities and methods of working will continue in the same way which is not realistic.
2. In this system of budgeting, there is no incentive for developing new ideas and news ways of functioning of departments.
3. Further, there is no incentive to reduce the cost of various activities.
4. It encourages spending up to the budget which leads to wastage of resources.
5. This system of budgeting does not help to find out whether the budget has become outdated or not.
6. It does not consider the changes in priority in allocation of resources since the budget was set originally.
7. There may be budgetary slack built into the budget, which is never reviewed. This may be because the managers might have overestimated their requirement in the past in order to obtain a favourable budget.

3.3.2 Zero-based Budgeting

Zero-based budgeting refers to the method of preparation of new budget without referring to the history of the budget. This system has been developed to overcome the drawbacks of incremental budgeting. In this system, a new budget is prepared by considering all the budget proposals afresh of a new. It does not look into the past budget and past pattern of allocations. Under this system, the budget proposals are taken a new of afresh without any reference to the previous years' budget. Thus, when a new budget is prepared without any reference to the past budget, the resulting budget is called the incremental budget.

Under zero-based budgeting every budget proposal is made from the bottom or scratch. Hence, it is important to justify each proposal in details. This system involves a complete reexamination of the ongoing programmes and activities and assess their continued usefulness. The new expenditure proposals are to compete with ongoing expenditure proposals based on their respective merits to claim a share of the available resources or funds.

According to Peter A. Phyrr, who is known as the father of Zero-based budget, Zero-based budgeting is an operating, planning and budgeting process that requires each manager to justify a budget request in details from the scratch. It means that a budget as whole is considered rather than to examine incremental changes only. Under zero-based budgeting, all financial requirements of departments are analysed, evaluated and justified annually. It involves evaluation and prioritization of all programmes at different levels of efforts. Each department is required to justify its budget request and rank programmes in order of priority so as to select the best alternatives and allocate resources accordingly. The budget is considered as a whole and afresh i.e. from zero base.

Steps Involved in Preparation of Zero-based Budget

1. Development of programmes with goals, objectives, costs and outcomes.
2. Prioritisation of programmes on the basis of merits.
3. Selecting of the best programmes through cost benefit-analysis.
4. Investigating the various alternative ways to attain the objectives.
5. Allocating of fund on the basis of priority of the programmes.

Advantages of Zero-based Budgeting

1. The chief advantage of zero-based budgeting approach is that it combines planning and budgeting into a single process which is focused on a comprehensive analysis of objectives, needs and priorities.
2. It ensures efficient allocation of resources as it is based on needs and benefits.
3. It can detect where a budget has been inflated and it can help to eliminate wasteful expenditure.
4. It also allows managers to find out a more cost-effective ways to carry out activities in their departments.
5. It increase staff motivation by providing greater initiative and responsibility in the decision making process.
6. It increases communication and coordination within the organisation.

Disadvantages of Zero-based Budgeting

1. The preparation of zero-based budget involves a huge amount of work in preparing and prioritizing programmes. This process can be extremely time consuming and exhausting.
2. It forces managers to justify every budget proposal details from the scratch which may be time consuming.
3. In this approach, it is necessary to train managers as the budgeting method must be understood clearly by the managers at various levels to be successfully implemented.
4. In this approach, the bidding for central funds and ranking of programmes on the scale of institutional priorities is essentially a comprehensive process. Thus, it can increase tension among the managers from different departments.
5. This approach rely on the honesty of the managers. The honesty of the managers must be reliable and uniform. If any manager exaggerates then it will skewed the results.

3.4 Deficits in Public Budget: Revenue, Fiscal and Primary

The public budget has two components; receipts and expenditure. The receipts are further divided into revenue receipts and capital receipts. The revenue receipts consist of tax revenue and non-tax revenue. The capital receipts consist of borrowings, recovery of past loans and receipts from disinvestment (sale of assets of the government). The expenditure of the government is classified under two broad heads; revenue expenditure and capital expenditure. The expenditure which is incurred on normal functioning of the government machineries is called revenue expenditure. Example, expenditure on wages and salaries, pensions, subsidies, allowances, interest payments etc. On the other hand, the expenditure which is incurred on acquisition and building of new assets is called capital expenditure. Example, expenditure on acquisition of land, building of power projects, construction of irrigation canals, roads and railways etc. Whenever, the expenditure of the government exceeds the revenue, the budget is said to be in deficit. There are three types of deficit in public budget, namely, revenue deficit, fiscal deficit and primary deficit.

3.4.1 Revenue Deficit

Revenue deficit in public budget occurs when the revenue expenditure of the government exceeds revenue receipts. Thus, revenue deficit can be defined as the difference between revenue expenditure and revenue receipt of the government.

Revenue deficit = Revenue expenditure – Revenue receipt

Revenue expenditure is the recurring expenditure of the government. It includes expenditure on wages and salaries, pensions, subsidies, interest payments, expenditure on health, education and sanitation etc. Revenue receipts include receipts from taxes (like income tax, corporation tax, sales tax, excise duties, custom duties) and non-tax revenue (like fees and fines, currency and coinage, profits and dividends, interest receipts, gifts and grants, escheats and forfeitures etc.).

The revenue deficit has the following implications:

1. It is measured to ascertain whether the recurrent expenditure of government on account of public consumption and current transfers are fully met out of current revenue or not. This is important as it is well accepted in the theory of public finance that the cost of provision of public goods should be defrayed from the proceeds of taxes levied on the population consuming those goods.
2. It is also used to see whether the government is required to borrow funds to finance its consumption expenditure or not. The existence of revenue deficit implies that the borrowed funds are used by the government to meet revenue expenditure which is uncalled for in the interest of sound finance.
3. Secondly, it is used to measure savings on the government account which is important to measure national savings.

3.4.2 Fiscal Deficit

Fiscal deficit refers to the overall deficit in the public budget during a financial year. It occurs when the total expenditure of the government exceeds total non-debt receipts of the government. Thus, fiscal deficit is defined as the difference between the total expenditure and total receipts (excluding borrowings) of the government.

Fiscal deficit = Total expenditure – total receipts (excluding borrowings)

(Revenue expenditure + capital expenditure) – (Revenue receipts + capital receipts other than borrowings)

Significance of Fiscal Deficit

Fiscal deficit is the broad indicator of the budget impact on macroeconomic stabilization. It has become an important variable and policy target. It is necessary to monitor and regulate fiscal deficit for the following reasons:

1. It is necessary to control the volume of fiscal deficit as government borrowings tend to crowd out private investment by raising interest rate and thereby introducing distortions in the allocations of resources.

2. The other reason for attaching importance to fiscal deficit is that net borrowing by the government adds to volume of public debt and over the years the debt may become unsustainable.
3. The higher volume of fiscal deficit also tend to generate inflationary pressure in the economy. Hence, it is necessary to reign in fiscal deficit within a limit to maintain price stability.
4. The increase in fiscal deficit also contributes to increase in domestic absorption and thus leads to a deterioration in balance of payment.

3.4.3 Primary Deficit

Primary deficit refers to the difference between fiscal deficit of the current year and interest payments on the previous borrowings of the government.

Primary deficit = Fiscal deficit – Interest payments

The total borrowing requirement of the government includes the interest payments on accumulated debts and others expenditures. Primary deficit is used to see how much the government has to borrow to finance expenditure other than interest payments. It shows the extent to which the interest payments have compelled the government to borrow in the current period. The implications of primary deficit are as follows:

1. It shows how much of the government borrowings are going to meet expenses other than interest payments.
2. A shrinking of the volume of primary deficit indicates progress towards fiscal health of the government.

3.5 Public Debt: Sources and Effects

In the early days borrowings were regarded a vice. But in modern times, borrowings have come to be recognized as an important method of government finance along with other sources like taxation, fees and dividend etc. Public debt refers to the obligations and liabilities of the government. When the government expenditure exceeds revenue, the government resorts to borrowings to finance the deficit in budget. The borrowed funds have to be repaid by the government along with interest charges. Thus, the borrowings create liability and repayment obligation which is known as public debt.

3.5.1 Sources of Public Debt

The government borrows fund through the issuing of bonds. The bonds are the credit papers which contain government promise relating to interest rate, maturity period and other conditions of borrowings. These bonds are purchased and sold in money market. The bond holders are the lenders of fund to the government. The government can borrow funds from various sources which are grouped into internal sources and external sources.

1. **Internal sources:** The internal sources include borrowing of funds from the people and institutions within the country. These sources are;

(i) Private individuals

(ii) Financial Institutions like Life Insurance Corporation

(iii) Commercial banks

(iv) Central Bank (Reserve Bank of India)

(v) Small savings and provident funds

2. External sources: The external sources of government borrowing include borrowing from foreign individuals, foreign government and international financial institutions. These sources are as follows:

(i) Foreign individuals

(ii) Foreign governments

(iii) Foreign banks and non-bank financial institutions

(iv) International financial institutions like World Bank, International Monetary Fund, International Finance Corporation, Asian Development Bank etc.

3.5.2 Effects of Public Debt

Public debt will have its effects on the whole economy. The following are the important effects of public debt.

(i) Effect on consumption: the borrowing of funds from people by the government reduces their disposable income. Hence, the income effect of public borrowing on consumption could be negative. But since the lending of fund to the government is voluntary, it will not lead to reduction in consumption as in the case of taxation. Further, the holding of bonds due to lending of funds to the government will make the people feel richer. This may alter their consumption pattern.

(ii) Effect on Production: If the government use the borrowed fund for more productive purpose than the lenders would have used, public debt will great boost the productive capacity of the economy and promote production and economic development. The borrowed funds spend on health and education will improve the ability to work and thereby contribute to enhance production.

(iii) Effects on Savings and Investment: Public debt influences savings and investment through the mechanism of interest rate. The issue of government bonds will tend to increase the rate of interest in the economy and thereby promote savings as it is interest elastic. However, the rise in the rate of interest due to reduction in money supply may adversely affect the investment.

(iv) Effects on Distribution of Income: The creation of public debt will increase inequality in distribution of income and wealth. The lenders of funds to the government are generally well-off people. But the government raises tax from the general tax payers. Thus, when the government repays the debt, wealth and income of the lenders increases and that of the general masses declines due to payment of taxes. Hence, the public debt tend to intensify the inequality in the distribution of income.

(v) Effects on Allocation of Resources: Public debt can also influence the allocation of resources in the economy. The funds raised by the government by way of borrowings can be used to improve economic infrastructure in the backward areas of the country. In this way, public debt an help to reduce regional economic disparity in the country.

(vi) Anti-cyclical Effect of Public Debt and Economic Stability: Public debt can be used as an instrument of compensatory fiscal policy to achieve economic stability. During the period of depression the economy requires enough purchasing powers. Hence, during such a situation the government can

increase purchasing power of the people through repayment of past debt to the people. On the other hand, during the period of inflation, the government need to use its debt policy in such a way that it helps to cool the economy. In such a situation, the government can reduce purchasing power of the people by borrowing from the people with high marginal propensity to consume. This will curb the purchasing power, reduce aggregate demand and restore economic stability.

(vii) Effects of External Debt: The effects of external debt on the economy can be serious if the fund borrowed from the foreign sources are not utilized judiciously. The external debt has to be repaid along with interest charges in foreign currency. Therefore, the repayment of external debt requires earnings of foreign currency through promotion of exports. Hence, externally borrowed funds have to be used for acquiring technical know-how which can develop industries of export products. However, if the external debts are used for unproductive purpose, then the country may become a bankrupt and its policy decisions may be influenced by the foreign powers.

3.6 Ricardian Equivalence

Ricardian equivalence is a controversial theory which was proposed by David Ricard. The theory was named after him by an American economist Robert barro. The theory suggests that government budget deficits are anticipated by the people who in turn respond by increasing savings and can unravel the government's expansionary policy.

The theory is based on the following assumptions:

1. People think over a longer horizon.
2. There is intergenerational altruism and concern.
3. Capital market are perfect (i.e. all can borrow and lend at a single rate).
4. The path of government expenditure is fixed.

Under these conditions, if government finance deficits by issuing bonds, the bequests that families grant to their children will be just large enough to offset the higher taxes that will be needed to pay-off those debt or bonds. The theory states that government can finance its deficit either by taxing current tax payers or by borrowing. Thus, there are two ways to finance deficit in budget:

(i) Tax now strategy

(ii) Borrowing (tax later) strategy

Thus, the choice is therefore between tax now and tax later. Ricardian equivalence theory states that both the policies are same. The theory suggests that it does not matter whether the government finances its spending with a debt or a tax increase, the effects on the total level of demand in an economy will be the same.

If the government finances its deficit by taxing the current tax payers, the disposable income of the people will decline and accordingly the aggregate demand will fall which will compensate the increase in aggregate demand due to additional expenditure by the government Hence, the policy may not be effective in raising the level of aggregate demand in the economy.

On the other hand, if the government finances some extra spending through borrowing (tax later) the people would have more income now to spend. But Ricardo argued that people would not spend more because they would realise that they would have to pay higher tax in future and therefore save the extra money in order to pay

the future tax i.e. they would willingly buy the bonds issued by the government and would reduce their current consumption. The extra savings by the people would exactly offset the extra spending by the government, so overall demand would remain unchanged.

Ricardian equivalence suggests that government attempts to influence demand using fiscal policy will prove to be fruitless. The theory is highly contrary to the Keynesian theory of multiplier effect of fiscal policy on income.

Criticism

Ricardian equivalence requires a number of assumptions that have been seriously challenged. It is based on the assumption of perfect capital market which is hard to be achieved given the complicated picture of international capital market.

Martin Feldstein argued that the creation of public debt depresses savings in a growing economy. James Buchanan criticized the theory for failing to compare the differential impacts of taxation and debt issue. He also criticized the theory for not providing empirical evidence about the full discount of future taxes.

Ricardian equivalence has been the subject of extensive empirical inquiry. Robert Barro found some confirmation of the theory in the post-world war period. However, most of the researches reject Ricardian equivalence in its pure form. But some studies have found Ricardian effects in saving behaviour.

3.7 Burden of Public Debt

The burden of public debt can be studied under two heads; burden of internal debt and burden of external debt.

Burden of internal debt: It is viewed that internal debt does not cause any burden since the money remains within the country. However, since the tax payers bear the responsibility of repaying the debt along with interest charges, they undergo an amount of hardship and strain. In this perspective, the public debt may impose a burden on the country. The true nature of the burden of internal debt, however, depends on how the burden of debt is defined. If the burden is defined as the loss of economic resources, the, internally held public debt does not impose any burden because the resources remain within the country. But if the burden is defined in terms of economic stress and strains on the people due to raising of additional tax to service and repay the debt, then it may tend to dampen incentives to work, save and invest.

If the burden is viewed in terms of reduction of income inequality, internally held debt does impose a burden on the society. The deficit spending by the government through borrowing can be inflationary after the full employment level. Thus, public debt can impose a burden on the society by increasing inflationary pressure in the economy.

James Buchanan is of the view that burden is to be considered in terms of reduction in personal satisfaction. Ricardo and Pigou argued that if the investment project is financed by tax, the first generation will

curtail consumption more than investment. On the other hand, if it is financed by borrowing they will curtail investment more than consumption. Thus, future generation will inherit smaller stock of capital assets and will thereby bear the burden of public debt.

The burden of debt can be viewed in terms money burden and real burden. There is no money burden of internal debt as the money remains within the country. But there is a real burden as it increases the income inequality and reduces ability to work, save and invest and puts strains on tax payers.

Burden of external debt: the external debt imposes both money and real burden. When the external debt is repaid, the resources will flow out of the country to foreign country. Further, it imposes real burden in the form of hardship and strains on tax payers.

3.8 Domar's Approach to Burden of Debt

Prof. Domar has defined the burden of public debt as the ratio of the total public debt to the total national income. It can be represented as follows:

$$\text{Burden of public debt} = \frac{Total\ public\ debt}{Total\ National\ Income}$$

He states that if the total amount of public debt increases year after year, the burden of the debt would increase. But if the national income also increases by a constant amount along with increase in the volume of debt, the burden of debt may actually fall. The burden will fall more if the national income rises by a greater proportion than the rise in the amount of debt. This is so because with increase in national income, the amount of tax collection and repayment capacity will also increase and larger amount of debt may actually impose lesser burden. Therefore, Domar opined that if all the people of the country put efforts and contribute to achieve a growing national income, it would greatly help the county to reduce the burden of debt.

Domar's argument that the burden of debt will reduce with increase in the volume of national income can be shown with the help of the following examples. Let us conceive three cases:

Case I: When national income remains constant

Case II: When national income increases over years and

Case III: When national income increases at faster rate

Suppose that in all the cases the government finances its budget by borrowing to the extent of 20% of national income.

Case I: When national income is constant at say, Rs. 500 crore

Burden	Year I	Year II	Year III	At the end of third year
$\frac{Public\ debt}{National\ Income}$	$\frac{100}{500}$	$\frac{100}{500}$	$\frac{100}{500}$	$\frac{300}{500}$(>1/2)

Case II: When national income increases by Rs. 100 crore per annum.

Burden	Year I	Year II	Year III	At the end of

				third year
$\frac{Public\ debt}{National\ Income}$	$\frac{100}{500}$	$\frac{120}{600}$	$\frac{140}{700}$	$\frac{360}{700}$ (=1/2 approx.)

Case III: When national income increases by Rs. 200 crore per annum.

Burden	Year I	Year II	Year III	At the end of third year
$\frac{Public\ debt}{National\ Income}$	$\frac{100}{500}$	$\frac{140}{700}$	$\frac{180}{900}$	$\frac{420}{900}$(<1/2)

From the above tables, it is clear that though the absolute amount of public debt increases from Case I to Case II to Case III from Rs. 300 crore to Rs. 360 crore to Rs. 420 crore each at the end of the third year, the burden of debt as the ration of public debt to national income decreases from more than half to half and then to less than half. Domar further argues that if the national income increases by a constant relative rate, the burden of debt will after sometime become constant and will not vary at all irrespective of the volume of the debt.

3.9 Management of Public Debt

In modern times public debt is being viewed as a major method of financing government expenditures in both developed and developing countries. In developed countries, public debt is used as an anti-cyclical device to maintain economic stability. But in developing countries, due to low revenue from taxes, public debt is used to finance economic development activities such as construction of roads, railways, bridges, power projects and provision of social infrastructure. Over the years there has been issue of growing volume of public debt. The emergence of large volume of public debt requires a proper management of public debt to ensure its sustainability.

The management of public debt should fulfill the following aspects:

(i) Low Interest Obligation: The management of public debt should ensure that the interest obligations are low. If the volume of public debt is large, then there is a need to raise more taxes for repayment of the debt. Since the tax imposes strains and frictions on tax payers, the safe limit of the public debt is determined by the strains and frictions which the economy can bear. Therefore, the debt issue, maturity structure, interest rates, tax mobilization and debt redemption should be planned in such a way that the interest obligation is low and the economy is subject to minimum possible strains and frictions.

(ii) Satisfy Preference pattern of Investors: The management of public debt must also satisfy the preference pattern of investors regarding income and liquidity. If the maturity of the bond is short

then it will have more liquidity but lower interest income and vice-versa. However, investors are interested in both liquidity and interest income. Therefore, the management of public debt should be planned in such a way that the interest obligation is low and the preference pattern of investors is satisfied.

(iii) Optimal Maturity Structure: The management of public debt should also ensure optimal maturity structure. This is important because if the ratio of short term debt is higher, the repayment obligation of the government at a point of time will be large. This may adversely affect the government expenditure programmes. On the other hand, if the ratio of long term debt is higher, the repayment obligation at a point of time will be lower but interest burden will be large. Hence, there is a need to maintain optimal maturity structure. Nowadays this is being done by using the technique called debt swapping operation under which the central conducts simultaneous sale and purchase of government securities.

(iv) Monetisation of Debt: Public debt or bonds are liquid in various degrees. These bonds can be bought and sold in the money market at any time at the wishes of the investors. The monetization of public debt poses a great problem to the management of debt. If the investors are free to monetise their bonds, the repayment obligation of the government at any point of time may be very large. Therefore, there is a need to impose some restrictions on monetization of bonds and provide higher interest rate on medium and long term bonds to discourage investors to monetise their bonds early. A combination of both the strategies; some degree of marketability restrictions and progressively higher interest rate for longer maturity bonds is desirable to reduce monetization.

(v) Maintenance of Interest Rate: Borrowing of funds from the market by the government reduces the availability of funds and thereby it may lead to rise in interest rate in the market. This may adversely affect investors in government bonds and also affect private investment. Therefore, the management of public debt should ensure that there is no post floatation rise in interest rate. This implies that for the successful management of public debt, there is a need for the support of the central bank. The central bank can act as a residual purchaser or seller of government bonds so that the value of bond does not fall or rise and interest rate is maintained.

(vi) Anti-cyclical Use of Public Debt: Nowadays public debt is increasingly used as a fiscal device to maintain economic stability. The management of debt should ensure that debt policy is used properly to fight inflation and depression. During the period of depression, the government should borrow from the banking system and make repayment of past debt to the people so as to raise aggregate demand. During inflation, the government should borrow from the public with high marginal propensity to consume and postpone repayment of debt and should not borrow from the banking system. This will reduce purchasing power and reduce aggregate demand. During inflationary period, the government should go for long-term debt and lengthen the maturity of existing debt. The lengthening of average maturity of debt will also raise the rate of interest and tend to curb private spending and will control inflation.

Let us sum up

The above discussion on public budget and public debt helped us to understand the various methods of formulation of budget and their respective merits and demerits. It also helped us to know the concepts of deficit in public budget and their implications and significance. The module also enabled us to understand about the public debt, sources and its effects, burden of debt and how Prof. Domar explained the burden of debt as the ration of total debt to national income. It also helped us to understand and gain knowledge about the issues related to management of public debt.

Key Terms

Incremental budget : It is largely a revision of previous budget.

Zero-based budget : : It is afresh or a new budget which is prepared without any reference to past budget.

Revenue deficit : It is the excess of revenue expenditure of the government over revenue receipt.

Fiscal deficit : It is the excess of total expenditure of the government over total receipts (excluding borrowings).

Primary deficit : It is the difference between fiscal deficit and interest payments.

Public debt : It refers to liabilities and obligations of the government.

Short Questions

1. What is incremental budgeting?
2. What do you understand by Zero-based budgeting?
3. Explain the concept of revenue deficit?
4. What does primary deficit indicate?
5. What is public debt?

Long Questions

1. Distinguish between incremental and zero-based budgeting? Discuss their advantages and disadvantages.
2. What is fiscal deficit? Explain the implications and significance of the concept of fiscal deficit.
3. Evaluate Domar's approach to burden of public debt.
4. Discuss the sources and effects of public debt.
5. State and explain Ricardian equivalence.
6. Discuss the principles of management of public debt.

Further/Suggested Readings

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UNIT II PUBLIC DEBT

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Structure

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2.0 INTRODUCTION

In the 18th and 19th centuries, the government, under the influence of *laissez faire* philosophy, which was reflected in economic liberalism, restricted its activities to its minimum unavoidable essential duties of providing protection and security to the citizens. Consequently, the activities of the state were limited to performing only the essential functions of protecting the community against external aggressions and internal disorders by spending on the defence and maintenance of law and order. These functions wereconsidered essential for the preservation of the community.

However, with the passage of time, with an enormous increase in the responsibilities of the state and also with the development of enlightened views on public finance, the governments in order to supplement their traditional financial resources started borrowing from individuals and institutions within the country and also from outside the country. Although borrowing as a source of financing certain government activities has not been unknown in the developed countries, the necessity of the public borrowing by the government is imperative in the case of less developed countries where the taxable capacity of the people is low. In modern times, public debt is as popular in the developedcountries as it is in the less developed countries.

In modern times, borrowing by the government has become a normal method of government finance along with other sources of public finance like taxes, fees, etc. In all countries of the world, public debt has shown the tendency of increasing rapidly. In fact, the debt burden, particularly external debt burden, of the world's less developed countries has grown phenomenally and quite disproportionately to the debt servicing capacity of these poor countries. At present, the external debt burden of the third world countries

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has crossed the staggering figure of over $2,000 billion mark and in the case of several individual developing countries of Latin America and Africa, the annual debt servicing burden of payment exceeds or nearly equals their total export earnings. For such unfortunate countries, there is little hope that in any foreseeable future they will be in a position to pay off their foreign debt. In fact, the external debt burden of the Third World countries has been mounting up year after year adding to the grave economic plight of these poor countries. These countries are in the never-ending external debt trap from which these countries find it almost impossible to come out. With each passing year, world's developing countries are sliding deeper in debt.

We find a significant difference in the composition of debt of the developed and developing countries. For example, the total public borrowings of the less developed countries may generally comprise the borrowings made from abroad while in a developed country these mainly consist of the borrowings raised internally from the local authorities, institutions and individuals. It is on account of this significant difference in the composition of public debt that the American economists, including Taylor, have emphasized the internal debt for their country. In India, however, the economists emphasize the external debt. However, both internal debt as well as external debt are the essential and important components of public debt. In this unit, you will get acquainted with the various aspects of public debt.

2.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss the differences between private debt and public debt
- Evaluate the importance and classification of public debt
- Describe the two important sources of public borrowings, viz., internal sources and external sources
- Assess the various effects of public debt
- Analyse the Ricardian theory of equivalence
- Discuss the burden of public debt and its types
- Analyse the term debt management
- Explain the Harrod-Domar model of economic growth

2.2 PRIVATE DEBT AND PUBLIC DEBT

The government of a country finances its expenditure from its income. The income of the government consists of what is called public revenue and public debt. In its wider sense, the term 'public revenue' includes all kinds of income. Consequently, it includes also the money that a government borrows. The amount borrowed by the government during any given year constitutes the income of that year. However, since debt has to be repaid to the creditors from whom it is borrowed, it does not constitute the income of the government from the point of the view of the long period. Thus, the main difference between the two is that public revenue consists of the money revenue or income which the government is not obliged to return to the people from whom it is obtained while public debt carries with it the obligation on the part of the government to repay the loan amount together with interest to the creditors from whom it has been borrowed.

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Thus, in a broad sense, public debt may be called 'revenue' of the state. Just as the taxes levied and collected in any given year constitute the income of the government, in the same way loans raised or debt incurred and received in that year also constitute the income of the government of that year. However, the vital difference between the public debt and the other traditional sources of public revenue (taxes, fees, etc.) is that while the former has to be repaid with interest, the latter are not. Taxes are collected from the public without any promise or commitment on the part of the government to provide the taxpayers any service, much less the commitment of paying them back to the taxpayers, but public loans or debt are taken by the government from the banks, institutions and individuals on the explicit understanding given in writing that these shall be repaid on maturity while interest shall be paid regularly, half-yearly or yearly as stipulated in the loan agreement.

The necessity of repaying the loans and various consequences of the different methods of redeeming a loan necessitate a separate study of the subject of public debt.

2.2.1 Differences between Private Debt and Public Debt

In the matter of public borrowing, the government is placed in almost a similar position as is a private borrower. The relationship between the government and the holders of the government bonds is the same as that between a private borrower and a private lender. The government is barely a government in all its characteristics in such transactions. Like a private borrower, the government may also borrow either for unproductive consumption or for investment purposes. The government will also have to pay interest on such borrowings. However, the dissimilarities between the two kinds of debt are quite glaring. The following are the main differences between the private and public debt:

- In times of emergency, like war or economic crisis, the state may force the people and/or institutions in the country to lend funds to it. No private individual or institution can, however, force or compel the other private individuals or institutions to lend.
- In the abnormal circumstances, the state can repudiate the payment of loans taken by it from the public while the private individual can under no circumstance refuse payment of loans to another private individual without inviting legal action. However, normally the state will only in very rare and exceptional circumstances take resort to repudiation of loan because such an act on its part will damage its prestige beyond repair.
- Public debt is generally spent for productive purposes whereas private debt may be spent both for productive as well as for unproductive purposes.
- The state usually repays public debt by taxing the people. The creditors also make their contribution to the extent they also pay taxes in this task of repayment of public debt. In other words, the burden of public debt is also borne by the creditors of the government. As against this, the burden of private debt is never borne by the creditors. In other words, we can say that a private person has to repay his/her debt either out of personal earnings or out of his/her accumulated assets or by borrowing from other sources. While the government can at least partially shift the burden of payment of public debt on the shoulders of the individual creditors in the country in the case of internally held debt.
- The state can unilaterally reduce the rate of interest payable on public loans but a private economic unit is not in a position to do so. Private borrowers have to pay the rate of interest which they have contracted to pay to the lenders.

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- The government may take loans from the public for a very long period while a private person can get loans only for a relatively short period of time. In fact, the public debt may consist of government bonds which have infinite or no maturity period.
- The government may borrow both from the internal and external sources. In other words, it not only borrows from others; technically it can also borrow from itself. When the government covers the budget deficit through the printing of paper notes, it amounts to taking loans from itself. However, a private person can borrow only from external sources.
- The proceeds of public debt are generally spent to promote the welfare of the society, including the creditors. For instance, when the government spends the loan proceeds on development schemes, it benefits almost all the sections of the community. Even the creditors are also benefited through this developmental expenditure. On the other hand, the private debt is not spent in the interest of creditors because it is exclusively spent to finance the individual or private project.
- Being large in amount, public debt significantly affects the production and distribution of wealth and income in the country while a private debt, being small in amount, produces no such effects.
- Since the credit of the government is generally high, it can borrow at lower interest rates than is possible for the private individuals. We can trust a government more easily than a private individual because the government loan is perfectly credit-risk free.

2.2.2 Causes for the Increase in Public Debt

The size of public debt has increased tremendously in modern times. There is hardly any government today which has not contracted loans both from abroad and in the country from its people. Following are the important causes for the extraordinary increase in public debt in modern times.

- **Abandonment of the *laissez-faire*, *laissez-passer* policy:** Modern governments have abandoned the policy of *laissez-faire* according to which they indulged in the minimum amount of economic activities in the community. The 19th century philosophy was that the government which governed the least and consequently spent the least was the best. Nowadays, governments actively participate in the economic affairs according to the requirements of the people. The present-day state is a welfare state. Consequently, it resorts to economic planning under which it undertakes the execution of several development projects in order to raise the living standards of people. In order to implement the economic plans it has to borrow funds frequently on a large scale from the public.

  Thus, government takes recourse to public debt for development purposes. Even the governments in advanced countries' have to undertake mass scale construction of public works like roads, railways, irrigation works, power-houses, etc., for accelerating the economic growth of their countries. The less developed countries interested in the optimum utilization of their economic resources find public debt a very useful device to finance the various development projects.
- **Unpopularity of taxation:** People generally do not like to pay taxes to the government. Taxation, whether old or new, has always been unpopular with the public. The citizens generally oppose the imposition of new taxes and enhancement of the old rates of taxation. To get over this public opposition, the government adopts the easier method of resorting to public debt.

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- **Facing natural calamities:** Sometimes, the government raises loans in order to face natural calamities, such as, floods, famines, earthquakes, etc. For example, in India, the government of Rajasthan has been spending a substantial amount on the famine relief works compelling it to draw a large overdraft on the Reserve Bank of India. Such cases of natural calamities lead to a sudden spurt in the government expenditure. Thus, the government would be committed to incur a much larger expenditure and would, therefore, run into a sizeable public debt.
- **Waging of wars:** When a country is engaged in war, it has to borrow heavily from the public. Modern warfare is so costly that the normal income of the state raised through taxation falls substantially short of the actual war expenditure. Besides, taxation beyond certain limits has disastrous consequences on production, and thus interferes with the most important objective during a war, namely, the winning of war. Moreover, a public loan is a better and easier method of collecting revenue than taxation. Governments, therefore, borrow extensively from individuals and institutions toward war financing.
- **Covering of temporary budget deficit:** Sometimes, the government does not consider it appropriate to meet its budget deficit by resorting to additional taxation. In such a situation, the government resorts to temporary borrowing from public.
- **Fighting the depression:** During the great depression of the 1930s, the long-practised traditional monetary techniques of raising the economy from the depth of depression failed. Fiscal policy was then devised as a way out to deal with the problem. Depression does not mean that the public has no money to spend. Money is there but due to lack of entrepreneurship, the money remains unutilized. Profit expectations being low, nobody is willing to invest his money. At such a juncture, the government can utilize this money by raising borrowings from the public and utilize these borrowings on its own to raise the level of aggregate effective demand in the economy. On the other hand, the private enterprise may be willing but not able to enhance production and thereby to raise output and employment due to lack of funds. At such times, the government may borrow from the banks and release the borrowed funds often supplementing the private enterprise. Either by ensuring circulation of new money or byactivating the idle resources in the economy by raising loans, the government may be able to lift the depressed economy and place it on the road to recovery and lead to prosperity.
- **Controlling inflation:** By raising public debt, the government can withdraw a large amount of money from the public and prevent prices from rising. Since the monetary policy of the central bank alone has not been very successful, fiscal policy of which the public debt constitutes an important part, has been attaining greater importance ever since World War I.
- **Financing economic development:** An underdeveloped country is always faced with the shortage of funds. Taxation is resented if it is heavily imposed on the people because the taxable capacity of the people is low. However, the need for finance is imperative in order to take the economy out of the vicious circle of poverty. In such a situation, public loans are the only way out for the government.

• Classification of Public Debt

Public loans differ from one another in many aspects. These differences are due to either the markets in which the loans are floated, the rate of interest offered on the government bonds, the conditions of repayment or the purpose for which they are used.

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Thus, public debt can be classified into various categories. For example, we may have internal and external loans, funded and unfunded loans, redeemable and irredeemable loans, productive and unproductive loans. In the past, loans of some governments have also been compulsory but loans of modern governments are voluntary. In times of emergency, the modern governments encourage and sometimes bring moral pressure on the people of their countries to subscribe for public loans (government bonds). However, direct compulsion is hardly ever brought to bear on the people in present times. The main classification of public debt can be discussed as follows:

1. Productive and unproductive public debt: Public debt is incurred for various purposes. Sometimes, a government borrows money in order to construct a railway line or a canal. Sometimes money is borrowed for purposes of famine relief and sometimes it is borrowed to wipe off a deficit in the government budget. It will be seen, therefore, that in some cases, the borrowed money is spent to produce goods or services that can be sold for a price. A railway line, for instance, is a profitable commercial proposition. While some railways do not pay, but many do pay. If the debt is incurred by the government for the purpose of constructing a railway line that pays, it would be called a productive debt. The same applies to a loan raised to finance the construction of an irrigation canal if it is able to pay for itself.

However, the public debt incurred to wipe-off the budget deficit or to help provide employment to people in the famine stricken areas and to supply people with food is not a productive debt. Thus, the word 'productive' here has been used in the businessman's sense. In simple words, we can say that productive debt is that debt whose proceeds are spent by the government directly for productive purposes. The spending of such a debt after some time on the completion of the project on which the borrowed money has been spent increases the revenue of the government out of which the government can pay the interest on this debt. Thus, productive loans add to the total productive capacity of the country. As against this, an unproductive debt is a debt wherein the proceeds are not spent directly for productive purposes. Such loans do not add directly to the productive capacity of the country. Consequently, it becomes increasingly difficult to repay such unproductive loans. It is on this account that this debt (unproductive) is often known as a 'dead-weight debt'.

2. Voluntary and forced public debt: Voluntary debt is taken from the people on a voluntary basis without coercing the people. Ordinarily, public debt is a voluntary debt. However, sometimes the government may take loans from the public even against their wishes. For example, at the time of grave national crisis like war, the government may go to the extent of raising forced loans from the public. In India, the introduction of a compulsory deposit scheme is an example of this forced kind of public loans. Consequently, loans given to the government by the people on their own accord are called voluntary debt, whereas compulsory debt comprises those loans which are taken by the government by coercing the people by virtue of its sovereign powers.

In most cases, the debt incurred by the government is voluntary and no loan is taken against the will of the lenders. However, in emergency when the people do not buy government bonds due to lack of faith in the stability of government, the government may make it compulsory for the people to lend to it a specified amount by forcing the people to buy the government bonds. Such loans (for example, war bonds) are termed as forced loans.

3. Internal and external public debt: The government of a country can go to any national and/or international capital market and borrow funds from there. Internal debt is

contracted by the government from the individuals and institutions within the country. On the contrary, external debt is taken by the government from the individuals, institutions and/or governments of foreign countries. For instance, under the British rule, the government of India used to take (i) rupee loans which were taken by the government from the people of the country, and (ii) sterling loans which were raised in the London money market. At present, the government of India has profusely borrowed from international financial institutions like the World Bank, the International Development Association, friendly foreign governments and from international capital markets.

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There is a general feeling that an internal debt is better than an external debt. Many people denounce the resort to external loans on the part of the government on political grounds by arguing that a foreign loan may carry with it foreign control of the country's economy. The main objection to an external loan seems to be based on the misconception that it involves a drain of wealth from the country. When loans are taken from the foreigners, the country has to pay annually a heavy sum of money by way of payment of interest on these loans. This results in the remittance of huge funds to foreign countries. Consequently, a large chunk of country's limited foreign exchange earnings from exports become non-available for the country's economic development. Moreover, an external debt can also pose a danger to the economic and political independence of the country. On the other hand, if we borrow money in the home market, there is no drain of the scarce national resources and the wealth remains in the country.

A country cannot, however, be rendered bankrupt by an internally held debt because it only causes the redistribution of wealth within the country while an external debt, if not used productively with care, may cause great hardship to the nation by increasing her debt burden beyond her debt repaying capacity. For example, for most of world's underdeveloped countries, the external debt servicing burden absorbs a major part of their total foreign exchange earnings through their limited exports. At present, the servicing of India's external debt accounts for over 22 per cent of the country's total export earnings while for many other developing countries, the debt-service ratio is much higher.

4. Funded and unfunded public debt: Funded debt is that public debt for the payment of which the government establishes a separate fund which is called the sinking fund. Every year the government credits a certain amount of money to this fund. On maturity, the debt is repaid out of this particular fund.

As against this, an unfunded public debt is a debt for the repayment of which the government creates no separate fund. The interest on this debt is paid by the government out of its ordinary income. The principal amount is repaid by the government by contracting additional loans from the market. It is on this account that a funded debt is sometimes also referred to as a floating debt or a long-term debt whereas an unfunded debt is called a short-term debt. Unfunded debt is generally paid off within a year. Treasury bills are an example of unfunded debt because these are generally for a period of three or sixmonths and are never for a period longer than a year.

Unfunded debts are incurred for purposes of financing the temporary deficit gap in the budget. Although the public revenue may be equal to public expenditure, but it may be that due to mismatching of the income and expenditure in the first half of the year the expenditure is greater than the revenue while in the second half the revenue is greater than the expenditure. In such a case, the government would have to borrow some money temporarily during the first six months as this debt can easily be repaid during the second half of the year out of the budget surplus. Such borrowings are, therefore, always in anticipation of public earnings.

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5. Redeemable and irredeemable public debt: Redeemable public debt refers to that debt, the principal amount of which is repaid by the government after a predetermined period of time. The government regularly pays interest on this debt. On the expiry of the maturity period of the debt, the government pays the principal amount to the lenders. It is on this account that it is known as a redeemable debt. In order to repay this loan, the government establishes, a sinking fund and credits a fixed amount of money every year to this fund. On the expiry of the debt period, the principal amount is repaid out of this sinking fund. Public loans are mostly redeemable on maturity.

As against this, a non-redeemable public debt is that debt, the principal amount of which is never returned by the government, although the government continues to pay interest on it permanently. The British Consols issued in 1750 by Prime Minister Henry Pelham's government is an example of such an irredeemable public debt.

The difference between the two kinds of loans is that when a loan is redeemable, the government has to make some arrangement for its repayment and funds have to be obtained for the loan to be repaid. It may be decided to repay it from tax-money and that is, in most cases, the best thing to do. For this purpose, either the old tax rates have to be enhanced and/or fresh taxes have to be imposed on people. In other words, there may be deepening and/or broadening of the tax structure. Which particular tax is better depends on a variety of considerations.

Certainly, it is not wise to go on borrowing without paying off the debt little by little because such a policy would plunge the government in heavy and an ever-growing burden of public debt. Moreover, the interest burden on public loans goes on mounting and the taxpayers will have to pay heavily in the end. Consequently, the redeemable debt is preferable to the irredeemable one because of its convenient method of payment.

(ii) SOURCES AND EFFECTS OF GOVERNMENT BORROWINGS

There are two important sources of public borrowings, viz., internal sources and external sources. Internally, the government may borrow funds from individuals, charitable trusts, financial institutions, commercial banks and other financial intermediaries and the central bank in the country. Externally, the government may borrow from individuals, international financial institutions and foreign governments. We shall discuss the important sources of public borrowing in the following manner. It may be mentioned at the outset that the exact effects of public borrowing will depend to a large extent on the sources of the borrowed funds.

1. Borrowing from individuals: If individuals purchases government bonds, some adjustment in their consumption pattern or in the use of their accumulated savings must occur. When government bonds are sold to individuals, there will be very little direct curtailing either of consumption or business investment. The government bonds will be bought largely from funds that would have been used to buy other securities and perhaps in part from idle cash balances. The diversion from other securities may indirectly have some contradictory effects which will be considered after the review of the other sources of funds since the effect is common to all of them. The net benefit here is that although individually people possess a very small amount to be spent on any small project but the government may use the entire collected amount successfully in building a big project.

Check Your Progress

1. What is public revenue?
2. How does public debt help during wartime?
3. State the reasons behind the differences in public loans.
4. Define productive debt.

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2. Borrowing from non-banking financial institutions: Another source of government borrowing is the borrowing from non-banking financial institutions. When the non-banking financial institutions such as insurance companies, investment trusts, mutual savings banks, chit funds, etc., buy government bonds, they reduce their surplus cash balances by making investment in the government bonds. These institutions prefer to invest their funds in government bonds on account of these bonds being perfectly free from credit-risk and also due to their high negotiability and liquidity. The rate of interest paid on government bonds is, however, relatively low. Consequently, in many cases, financial institutions prefer to invest in the high-risk high-return giving securities, particularly in the equity shares of companies under the management of known and experienced industrialists. When the non-banking financial institutions purchase the government bonds, they do so in order to reduce their cash holdings.

3. Borrowing from commercial banks: Both the individuals and the non-banking financial institutions purchase government bonds out of their own cash funds. The commercial banks can do so by creating additional purchasing power. The commercial banking system can make additional loans up to an amount determined by the credit multiplier which is determined by their excess cash reserves and the required cash reserve ratio. The credit creation is made possible by the fact that money loaned by a bank is typically added to the accounts of the borrowers and is paid to people who have accounts with other banks.

4. Borrowing from the central bank: The central bank of the country subscribes, at times substantially, to government loans by supporting these loans in the money and capital markets. This action creates the purchasing power in the same manner as the commercial banks do. By purchasing government bonds, the central bank credits the account of the government. The latter pays to its creditors by drawing cheques on its account maintained with the central bank. Those bond-holders who receive the cheques from the government deposit these cheques with their banks. As a consequence, these banks find themselves with large reserves which become the basis for additional loans and advances.

5. Borrowings from external sources: Apart from borrowing from different individual and institutional sources in the country, the government may also borrow from other countries. These borrowings can be used to finance war expenditure or to buy the much-needed defence equipment or to pay for the import of capital goods required for the various development projects, etc. In recent years, the two important external sources of government borrowings are *first*, international financial institutions like the International Monetary Fund, the World Bank Group and the International Finance Corporation. These financial institutions provide loans to the member countries both for short term, for overcoming the temporary balance of payments difficulties and also for long-term, for development purposes. The *second* external source of borrowing is the government assistance from friendly nations which is generally received for development projects. In modern times, for the less developed countries, like India, external sources of government borrowings have become considerably important. Up to the end of June, 2009, India had received the massive long-term loan and development credit assistance of US $20,40,95 million in the form of 1,816 loans and development credits from the World Bank Group comprising the IBRD and the IDA. She has also received massive assistance from the 'Aid India Club', a consortium of the friendly aid-giving countries for her economic development.

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2.3.1 Effects of Public Debt

Following the well-known German economist Adolph Wagner, economists have argued that the government should use its tax income in order to finance its current expenditure and it should take recourse to borrowing from the public only in order to finance its capital expenditure. In modern times, it is commonly accepted that taxation and borrowing can be used for either type of expenditure depending upon the circumstances. In case of less developed countries, both taxation and borrowing are used to finance development projects. The economic effects of government expenditure financed by public borrowing are basically different from the effects of similar expenditure financed by taxation in the following two important aspects:

- Taxation curtails the wealth of the taxpayers while loans do not reduce the wealth of the lenders but merely change its form.
- In taxation, the funds are transferred from the public to the government compulsorily while in the case of borrowing, such a transfer of funds is voluntary.

The uniqueness of public debt lies in the fact that it has its 'revenue effects' as well as its 'expenditure effects'. In the first place, the raising of money by means of a loan makes the people change their budgets. Although it may not directly reduce the consumption expenditure as taxation does because it is not out of the current incomes but out of savings generally that the public loans are purchased by the people but it is certain that the raising of money affects the overall expenditure, consumption and capital expenditure. Thus, as its first effect, public debt affects the overall expenditure of people in the country.

Secondly, the benefits conferred on the people by the expenditure of money raised by public loans, have another kind of effects on the economy. These benefits of the loan need not always be different from those that are conferred on the public by spending the money raised by taxes provided that the borrowed money is used for the same purposes as the money raised by taxes is used.

1. Effects on Consumption and Investment

Government borrowing should not normally result in the curtailment of consumption because lending to the government, being voluntary, will be mostly met out of savings and not through reduction in consumption expenditure; only in case of war-time borrowing programme, substantial pressure is applied on the individuals to reduce their consumption in order to buy government bonds. Otherwise the possible direct adverse effect on consumption is that which may result from special advantages of the new government bonds or the higher interest rates as these might offer some inducement to individuals to save more out of their given income by curtailing their current consumption.

There is greater possibility of adverse effect of public debt on investment. We know that the sale of bonds to the commercial banks having excess cash reserves increases the purchasing power through credit creation. Consequently, it should not curtail investment. On the other hand, the sale of government bonds to individuals reduces the funds which they have for expansion of their own business. There will be no contradictory effect if the bonds are sold to the central bank, to the commercial banks if they have excess cash reserves which they utilize to purchase the bonds, or to the individual lenders who purchase them out of surplus funds.

Apart from these effects, there is one direct effect. The growth of public debt may give rise to the fear of increased taxes in future. The profitability of investment

running over a long period of years will appear to be less if it is felt by the people that the government borrowing will result in higher taxes in future.

2. Effects on the National Income

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Since under usual circumstances, the borrowing of funds will have little contractionary effect on the economy, the net effect of a programme of government expenditure financed by borrowing is almost certain to be expansionary. The extent of the expansionary effect will be greater than that arising out of the financing of the same expenditure by taxation. Borrowing will have almost no adverse effect on consumption and no great adverse effect on investment. In contrast, any programme of taxation is certain to have considerable contractionary effect. If government bonds are sold to the central bank, and the commercial banks increase loans on the basis of their larger cash reserves, the borrowing itself, as well as the expenditure of the borrowed funds, will have an expansionary effect on the economy. The only instance in which the overall effect of public borrowing is likely to be contractionary is that in which the borrowing creates great fear about future financial stability of the government.

3. Effects on the Distribution of Income

A programme of government expenditure financed by borrowing increases the real income of those people who benefit from the expenditure without currently reducing the purchase of the bonds (except through price increases with full employment). If the government expenditure is meant to provide greater economic welfare to the lower income groups, the result will be a reduction in the inequalities and a more equal distribution of income between people. However, to the extent the loan finance becomes inflationary some of the favourable effects on the distribution of income may be neutralized.

Another point to be considered here is the payment of interest on the bonds. Interest payment represents a transfer of real income from the taxpayers to the bond-holders because the government will have to tax the people so as to pay to the bondholders the interest and later the principal amount as well. If the bond-holders and the taxpayers are identical persons, there will be no net redistribution of income. This will, however, be possible only in a very rare situation. Consequently, some redistribution of income will take place so long as the taxpayers and the bond-holders belong to the different income groups in the community.

4. Effects on the Allocation of Resources

The public debt, in itself has little effect on resource allocation and, therefore, on the composition of national product. However, to the extent that public debt curtails business investment activity in the economy, the output of capital goods compared with the total output will be less. Furthermore, the decline in investment will not be equal in all the industries, being greater in some industries than in the others. The allocation of resources is not affected by the method of financing.

Check Your Progress

5. What are the two important external sources of government borrowings?
6. Where does the uniqueness of public debt lie?
7. Why should government borrowing not result in the curtailment of consumption?

(iii) RICARDIAN EQUIVALENCE

The Ricardian equivalence proposition is also referred to as Ricardo–De Viti–Barro equivalence theorem. The Ricardian equivalence is an economic hypothesis that holds that consumers are forward looking. Therefore, the budget constraints of a government are internalized by the consumers when they make their consumption decisions. From

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here it follows that for a government's given pattern of spending, the method employed for that spending's financing will not affect the consumption decisions of the agents, and so there will be no change in the aggregate demand. Therefore, the Ricardian equivalence is employed as an argument against tax cuts and increases in the spending capacity aimed to boost the aggregate demand.

The expenditure of a government can be financed by it in two ways—imposing taxes and issuing of bonds. Considering the fact that bonds are after all loans, finally they will have to be repaid and this payment will most probably be done by increasing tax levels at a future date. Hence, the only choice is to impose taxes at that moment or impose them later. This is known as 'tax now or tax later'.

Let us consider that a certain amount of additional spending is financed by the government with the help of deficits, which means that the government makes the choice of 'tax later'. Based on the Ricardian equivalence hypothesis, it will be anticipated by the taxpayers that they will be subjected to higher taxes in the future. Therefore, these tax payers will raise the level of their savings to be in a position to pay higher taxes in the future and in effect will be decreasing their current levels of consumption. The consequence on the collective demand would be similar to the government choosing the tax now option.

The Ricardian theory is related to two factors:

- Income life cycle hypothesis
- Rational expectations on behalf of consumers

An argument put forth is that in case the government uses the path of borrowing money for the purpose of funding a tax cut, it is immediately realized by rational consumers, as already stated, that in future they will be subject to higher taxes and start saving theirextra income to be prepared for such a future.

All the consumers are keen on ensuring that they have a smooth consumption pattern throughout their life. Hence, in case a future tax rise is anticipated by consumers, they will immediately put aside the current cuts as savings so that they can smoothly meet the future demand of increase in taxes. This affects the fiscal policy. In case the above is true, then fiscal policy is rendered redundant.

It was in the early 19th century that David Ricardo became the first person to put forth the above mentioned possibility. Nevertheless, he himself was not unconvinced of what empirical relevance it would have. In the 1890s, the Ricardian equivalence was worked upon and elaborated by Antonio De Viti De Marco. In the 1970s, the question was independently taken up by Robert J. Barro so that he could provide a firm theoretical foundation to the proposition.

Ricardo and War Bonds

Ricardo in his '*Essay on the Funding System*' (1820) made a study of the difference that would take place if a war was financed with £20 million in current taxes or by issuing government bonds that came with infinite maturity and annual interest payment of £1 million in all the following years financed by future taxes. Assuming that the rate or interest would be 5 per cent, the conclusion made by Ricardo was that as far as spending was concerned, both the proposals added up to the same value. Nevertheless, Ricardo himself was doubtful as to the practical consequence of this proposition. Ricardo added

to his initial exposition that it is not exactly in a manner like this that evaluation of taxes is carried out by individuals, and they seem to mostly have a myopic view of the tax path.

2.4.1 Problems Faced by the Theory

The theory of Ricardian equivalence seems to have various problems such as:

- It is not correct to assume that all consumers are rational. Most consumers will not be able to anticipate that the present tax cut will result in taxes being raised at some point in future.
- It is a misleading assumption that any tax cut will result in savings. During the time of recession, there will be a fall in the average propensity to consume and this is not the same as the marginal propensity to consume. There is evidence to show that some of the tax cut money is spent by people even if there is a rise in the average propensity to save.
- Growth can be boosted by tax cuts and requirements for borrowing can also be reduced. During the time of recession, there is usually a sharp rise in government borrowing due to automatic stabilizers (higher spending on unemployment benefits, lower tax revenue). If it is so that with tax cuts both economic growth and spending get boosted, then the increased growth would aid in improving tax revenues and reducing government borrowing. Therefore, with increase in growth and the economy getting out of recession, there will be an improvement in the fiscal position of the government.
- During recession, there will be no crowding out. At the time of recession, there is a rise in savings of the private sector due to lack of confidence. One way to ensure that the savings of the private sector are utilized is by implementing an expansionary fiscal policy. Debates have shown that if there is higher government spending which is also financed by borrowing, it will automatically lead to lower spending in the private sector. This does not seem to be true. The government is not preventing the spending of the private sector, it is in fact making use of the savings of the private sector so that aggregate demand can be increased.
- Multiplier effect: There might be a further rise in spending of the economy when there is an initial increase in government spending and this can lead to the final increase in GDP being much larger than what was initially pumped into the economy.

2.4.2 Ricardo–De Viti–Barro Equivalence

It was in the year 1974 that Robert J. Barro came up with a theoretical foundation for Ricardo's speculation about which even Ricardo had been hesitant. Robert J. Barro possibly was ignorant of the earlier notion put forth by Ricardo and the later extensions added to it by De Viti.

Following are the assumptions of Barro's model:

2.4.2.1 Families act as infinitely lived dynasties because of intergenerational altruism

2.4.2.2 Capital markets are perfect (i.e., all can borrow and lend at a single rate)

2.4.2.3 Government expenditures' path is fixed

In the light of the above assumptions, in case governments finance deficits with the issuing of bonds, whatever legacies are granted to their children by families will not

be more than what they can use to offset the higher taxes which will be required for the paying off of the bonds that were bought. Part of the conclusion drawn by Barro was as follows:

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> ... in the case where the marginal net-wealth effect of government bonds is close to zero ... fiscal effects involving changes in the relative amounts of tax and debt finance for a given amount of public expenditure would have no effect on aggregate demand, interest rates, and capital formation.

For new classical macroeconomics, the proposed model made an important contribution and it was built around the assumption of rational expectations.

According to Barro (1979), the Ricardian Equivalence Theorem is:

> ... shifts between debt and tax finance for a given amount of public expenditure would have no first-order effect on the real interest rate, volume of private investment, etc. noting that 'the Ricardian equivalence proposition is presented in Ricardo'. However, Ricardo himself was sceptical of this equivalence.

There is a crucial importance of the Ricardian equivalence in fiscal policy considerations as far as new classical macroeconomics is concerned. In making an assessment of the Ricardian equivalence or for that matter of any new classical doctrine, it is important to remember what assumptions and conditions are attached with them or in other words what is their conditional character. Hence, it is not correct to separate the equivalence theorem from the assumptions associated with it and on which the theorem is based. In other words, Ricardian equivalence does imply that counter-cyclical efforts will fail, and it underlines what conditions are necessary for failure, and therefore, for success. Since government expenditure is fixed, and if agents keep expectations that are rational, there is no potential that the government has for exerting counter-cyclical efforts. In the presence of all of these conditions together, tax cuts mean a pressure for increase in taxes at a future date because the budget's resource gap caused by the initial tax cut has to be filled by the government. Therefore, there is no increase in the consumption as rational agents treasure up the additional income from the tax cut.

It is clear that even if a single condition which has been specified as essential for the working of the equivalence is missing, counter-cyclical fiscal policy would become effective.

Check Your Progress

8. Fill in the blanks with appropriate words.
   (i) The Ricardian equivalence proposition is also referred to as ________ equivalence theorem.
   (ii) The expenditure of a government can be financed by it in two ways: ________ and ___________.
   (iii) It was in the year 1974 that _ ______ came up with a theoretical foundation for Ricardo's speculation.

(iv)BURDEN OF PUBLIC DEBT AND MANAGEMENT OF PUBLIC DEBT

The government needs to borrow funds by the public through public debts to meet the needs of various development and non-development programmes. Burden of public debt is of two types: internal public debt and external public debt.

2.5.1 Internal Public Debt

We may discuss the burden of an internally-held public debt under the following headings:

1. **Direct money burden:** In the case of internal public debt, there is no direct money burden on the community as a whole since the payment of interest on the debt and the imposition of taxes to pay the interest involve simply a transfer of purchasing power from one group of persons to another. In fact, taxes raised in order to pay the interest on government bonds are also imposed on and paid by the rich people who are also the purchasers of government bonds and consequently

the interest recipients. It means that the government takes away money from their left pockets and returns it back in their right pockets. Thus, in internal public debt, there is only a redistribution of purchasing power. To the extent that the bond-holders and taxpayers are the same set of persons, there may not be any net burden at all on the community. However, to the extent the bond-holders and the taxpayers belong to different income groups, there will occur changes in the distribution of income between different sections of people in the society. For example, when the government raises internal loans, the purchasing power gets transferred from the lenders to the government. The government, in its turn, spends the loan proceeds on productive works as a result of which the purchasing power again gets transferred to the producers, contractors, workers, etc.

2. **Indirect money burden:** When the government spends the loan proceeds on development projects, it results in the creation of demand for several commodities and services. As a consequence, the prices of these goods and services rise, imposing additional burden on the society. This is the indirect money burden of an internal public debt.
3. **Direct real burden:** The government repays the principal amount and interest in the case of internal debt by imposing new taxes on the people. Ordinarily, the taxpayers are poor people while the lenders are relatively rich. When the government pays the principal and the interest to the bond-holders after collecting money through taxes imposed on the people, it results in the transfer of the purchasing power from the poorer sections to the richer sections of the community. Consequently, the inequalities in the distribution of income and wealth in society get further accentuated. Besides, the taxpayers are generally the active people while the creditors are invariably inactive people, mostly living on their past accumulated wealth. The ultimate result of the repayment of internal public debt is that wealth gets transferred from the active sections of society to the inactive sections of society. This is contrary to national interest. This is the direct real burden of the internal public borrowing.
4. **Indirect real burden:** The government imposes additional taxes on the public to repay the public debt. As result of this, the economic inequalities in the country get further accentuated as most taxes are levied on poor people in the form of indirect taxes. This produces adverse repercussions on the capacity to work and save of the people. Consequently, the productive power of the people declines. This is the indirect real burden of internal public borrowing.

2.5.2 Burden of External Public Debt

The incidence of external public debt can be discussed under the following headings:

- **Direct money burden:** In the case of external public borrowing, the debtor country has to pay to the creditor country every year huge sums of money by way of payment of interest on loans. After the maturity of debt, the principal amount of loan has also to be paid to the foreign country in the foreign exchange. In order to earn this foreign exchange, the country has to make exports. Such exports for which the country receives no payment from the foreign country are known as 'unrequited exports' and represent the direct money burden of an external public debt on the nation. Today, the developing countries are caught in the external debt trap and the debt-service ratio of many of these debtor countries is very high, standing above 50 per cent, while the debt-export ratio has been well above

the 300 per cent level. In case of India, the debt-service ratio is around 30 per cent while the debt-export ratio is around 225 per cent.

- **Indirect money burden:** Sometimes, the debtor country has to pay interest in terms of the goods and services to the creditor country. In other words, the debtor country has to export goods and services on a large scale to the creditor country. This inevitably results in a rise in the prices of these goods and services in the country. As a consequence, there is a steep fall in the economic welfare of the community. This fall in community's welfare shows the indirect money burden of the external public debt.
- **Direct real burden:** The government very often imposes new taxes on the people to pay the external debt. Ordinarily, the burden of these taxes falls more heavily on the poor sections than on the rich sections of the society. This shows the direct real burden of the external public debt.
- **Indirect real burden:** As we know, the government imposes taxes on the people to pay the external debt as a consequence of which the capacity of the people to work and to save declines. Ultimately, this decline in peoples'capacities produces unfavourable effects on production. It shows the indirect real burden of an external public debt. Apart from all this, an external public debt is also fraught with the danger of the debtor nation becoming a political hegemony of the creditor nation.

2.5.3 Management of Public Debt

The term debt management refers to the formulation and implementation of a debt policy designed to achieve certain objectives. According to the traditional philosophy, debt management consisted of minimizing its interest cost and paying it off as early as possible. However, a modern welfare state uses debt management as a policy tool for achieving various socio-economic objectives. Of course, every government is still interested in keeping the interest cost to the minimum possible but if this objective is in conflict with other objectives, it is sacrificed. Other important objectives before authorities include economic stabilization, growth, employment and overall soundness of the financial system as a whole.

Debt management policy has to run in harmony with the monetary management of the country. They both influence stabilization and economic growth. Open market operations are usually conducted by sale/purchase of government securities. Through general and selective credit controls, monetary policy tries to influence the volume and flows of funds and thereby the working of the entire economy. The way in which debt management can also contribute to this policy objective has been discussed above. It has also been seen how the objective of reducing interest cost on debt can come into conflict with the anti-cyclical monetary policy of the country.

It should be noted that the aggregate volume of outstanding debt reflects a cumulative effect of budgetary policy of the government. The volume of debt increases or decreases in line with deficit or surplus budgeting. But monetary policy can aim to alter the volume and composition of money and credit without any such constraint. In the case of public debt, the management part would mainly comprise changing its maturity composition so as to affect its yield structure and liquidity content. But it must be reiterated that monetary policy and public debt are closely linked.

In a big country with a multi-layer government, effort must be made to ensure inter-government coordination. Care has also to be taken to ensure that their borrowing

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programmes and terms and conditions of loans to be raised do not come in conflict with each other. Normally, the national government is able to borrow at lower rates than a sub-national government. Therefore, the rates of interest offered on central and state governments, loans should vary to accommodate this fact. Again different governments should avoid entering the market at the same time or in quick succession, particularly if the availability of funds in the market is limited compared with combined requirements of the governments. In India, the task of coordination in all these aspects is entrusted to the Reserve Bank of India. It advises them regarding the timings, terms, and the amounts of loans that can be raised in the market without undue difficulty.

(v) DOMAR'S GROWTH MODEL

E. D. Domar provided the model of public debt sustainability assessment and states that, in order to offer the sustainability of public debt, its share of GDP should be, on the average and long term, deteriorating or constant. Therefore, the condition which has to be fulfilled to ensure the stability of public indebtedness or, in other words, to provide the premises necessary for it not to grow continuously, is that the interest rate for government loans should not exceed the economic growth rate (of GDP). Keeping this in mind, Harrod and E. Domar developed a path-breaking theory of economic growth, i.e., the capital accumulation growth theory—popularly known as Harrod-Domar growth theory.

Harrod-Domar growth model is an extension of Keynesian short-term analysis of full employment and income theory. It provides 'a more comprehensive long period theory of output'. Harrod and Domar had in their separate writings concerned themselves with the conditions and requirements of steady economic growth. Although their models differ in details, their conclusions are substantially the same. Their models are therefore known as Harrod-Domar growth model.

The Central Theme of Harrod-Domar Growth Model

Both Harrod and Domar consider capital accumulation as a key factor in the process of economic growth. They emphasise that capital accumulation (i.e., net investment) has a double role to play in economic growth. It generates income, on one hand, and increases production capacity of the economy, on the other. For example, establishment of a new factory generates income for those who supply labour, bricks, steel, cement, machinery and equipment, etc., and at the same time, it increases the total capital stock and thereby the production capacity of the economy. The new income generated creates demand for goods and services. A necessary condition of economic growth is that the new demand (or spending) must be adequate enough to absorb the output generated by increase in capital stock or else there will be excess or idle production capacity. This condition should be fulfilled year after year in order to maintain full employment and to achieve steady economic growth in the long-run. This is the central theme of Harrod-Domar growth model.

Let us now describe the Harrod-Domar model of economic growth in its formal form.

(a) Assumptions of Harrod-Domar Growth Model

Harrod-Domar model assumes a constant capital-output ratio. That is, it assumes a simple production function with a constant capital-output co-efficient. At macro level,

Check Your Progress

9. What is the indirect money burden of an internal public debt?
10. What are 'unrequited exports'?
11. Define debt management.

the model assumes that the national output is proportional to the total stock of capital. The assumption may thus be expressed as:

$$Y = kK \qquad \ldots(7.1)$$

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Where Y = national output; K = total stock of capital and k = output/capital ratio (i.e., the reciprocal of capital/output ratio).

Since output/capital ratio is assumed to be constant, any increase in national output (ΔY) must be equal to k-times ΔK, i.e.:

$$\Delta Y = k\,\Delta K \qquad \ldots(7.2)$$

It follows from Eq. (7.2) that growth in national output (ΔY) per time unit depends on and is limited by the growth in capital stock (ΔK). If economy is assumed to be in equilibrium and the existing stock of capital is fully employed. Eq. (7.2) tells also how much additional capital (ΔK) will be required to produce a given quantity of additional output (ΔY).

Since increase in capital stock (ΔK) in any period equals the net investment (I) of that period, Eq. (7.2) may be rewritten as

$$\Delta Y = k\,I \qquad \ldots(7.3)$$

Another important assumption of the Harrod-Domar model is that the society saves a constant proportion (s) of the national income, (Y), i.e.:

$$S = sY \qquad \ldots(7.4)$$

Where S = savings per unit of time, and s = marginal propensity to save.

And, at equilibrium level of output, the desired savings equals the desired investment, i.e.:

$$S = I = sY \qquad \ldots(7.5)$$

Given these assumptions, the growth rate, defined as $\Delta Y/Y$, may be obtained as follows. If the term sY is substituted for I in Eq. (7.3) and both sides are divided by Y, it gives:

$$\frac{\Delta Y}{Y} = k \cdot s \qquad \ldots(7.6)$$

As Eq. (7.6) shows, the rate of growth equals the output/capital ratio (k) times marginal propensity to save (s). Since, growth rate $\Delta Y/Y$, pertains to the condition that $I = S$, this may also be called equilibrium growth rate, which implies capacity utilisation of capital stock. This growth rate fulfills the expectations of the entrepreneurs. Therefore, this growth rate has been termed as warranted growth rate,' (Gw), to use Harrod's symbol. Harrod defines Gw as 'that rate of growth which, if it occurs, will leave all parties satisfied that they have produced neither more nor less than the right amount.'

According to Harrod-Domar model, economic growth can be achieved either by increasing marginal propensity to save and increasing simultaneously the stock of capital, or by increasing the output/capital ratio. When marginal propensity to save increases overall savings increase. Savings transmuted into investment increases income and production capacity of the nation. Increase in income leads in increases in demand for goods so that additional output generated through additional investment is absorbed. On the other hand, increase in production capacity in one period creates more income in the following periods. Higher incomes lead to higher savings and investment and till higher

income in the subsequent periods. In this process, the investment increases at an accelerated rate based on the principle of acceleration.

This proposition of Harrod-Domar model is based on the assumption that ***warranted growth rate (Gw)*** is equal to the actual or ***realized growth rate (Gr),*** i.e., expected growth rate is always realised. This is possible only under the following simplifying assumptions of the model:

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- *mpc* remains constant
- Output/capital ratio remains constant
- Technology of production is given
- Economy is initially in equilibrium
- There is no government expenditure and no foreign trade
- There are no lags in adjustments (a) between demand and supply, and (b) between saving and investment

Since these assumptions make the model economy unrealistic, the warranted (or expected) growth rate may not always be equal to the actual (realized) growth rate. And if warranted and actual growth rates are not equal, it will lead to economic instability.

(b) Capital Accumulation and Labour Employment

We have so far discussed Harrod-Domar model confining to only one aspect of the model, i.e., accumulation of capital and growth. Let us now discuss another important aspect of the model, i.e., employment of labour. In Harrod-Domar model labour can be introduced to the model under the assumptions that:

- Labour and capital are perfect complements, instead of substitutes, for each other
- Capital/Labour ratio is constant

Given these assumptions, economic growth can take place only so long as the potential labour force is not fully employed. Thus, the potential labour supply imposes a limit on economic growth at the full employment level. It implies that:

- Growth will take place beyond the full employment level only if supply of labour increases
- Actual growth rate would be equal to warranted growth rate only if growth rate of labour force equals the warranted growth rate

However, if labour force increases at a lower rate, the only way to maintain the growth rate is to bring in the labour-saving technology. Under this condition the long-term growth rate will depend on (i) growth rate of labour force ($\Delta L/L$) and the rate of progress in labour-saving technology (i.e., the rate at which capital substitutes labour, *m*). Thus, the maximum growth rate that can be sustained in the long-run will be equal to $\Delta L/L$ *plus m.* Harrod calls this growth rate as **natural growth rate (*Gn*)**.

(c) Harrod-Domar Growth Model is a Razor-edge Model

The major defect of the Harrod-Domar model is that the parameters used in this model, viz., capital/output ratio, marginal propensity to save, growth rate of labour force, progress rate of labour-saving technology, are all determined independently out of the model. The model therefore does not ensure the equilibrium growth rate in the long-run. Even the slightest change in the parameters will make the economy deviate from the path of equilibrium. That is why this model is sometimes called as 'razor-edge model'.

Check Your Progress

12. What according to Harrod and Domar is the key factor in the process of economic growth?
13. State one assumption of the Harrod-Domar model.
14. State the major defect of the Harrod-Domar model.

(vi) SUMMARY

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In this unit, you have learnt that:

- The government of a country finances its expenditure from its income. The income of the government consists of what is called public revenue and public debt. In its wider sense, the term 'public revenue' includes all kinds of income. Consequently, it includes also the money that a government borrows.
- The relationship between the government and the holders of the government bonds is the same as that between a private borrower and a private lender. The government is barely a government in all its characteristics in such transactions.
- Public debt is generally spent for productive purposes whereas private debt may be spent both for productive as well as for unproductive purposes.
- When a country is engaged in war, it has to borrow heavily from the public. Modern warfare is so costly that the normal income of the state raised through taxation falls substantially short of the actual war expenditure.
- Public loans differ from one another in many aspects. These differences are due to either the markets in which the loans are floated, the rate of interest offered on the government bonds, the conditions of repayment or the purpose for which they are used.
- Redeemable public debt refers to that debt, the principal amount of which is repaid by the government after a predetermined period of time. The government regularly pays interest on this debt. On the expiry of the maturity period of the debt, the government pays the principal amount to the lenders.
- There are two important sources of public borrowings, viz., internal sources and external sources. Internally, the government may borrow funds from individuals, charitable trusts, financial institutions, commercial banks and other financial intermediaries and the central bank in the country.
- The two important external sources of government borrowings are *first*, international financial institutions like the International Monetary Fund, the World Bank Group and the International Finance Corporation. The *second* external source of borrowing is the government assistance from friendly nations which is generally received for development projects.
- Following the well-known German economist Adolph Wagner, economists have argued that the government should use its tax income in order to finance its current expenditure and it should take recourse to borrowing from the public only in order to finance its capital expenditure.
- Government borrowing should not normally result in the curtailment of consumption because lending to the government, being voluntary, will be mostly met out of savings and not through reduction in consumption expenditure; only in case of war-time borrowing programme, substantial pressure is applied on the individuals to reduce their consumption in order to buy government bonds.
- The Ricardian equivalence proposition is also referred to as Ricardo–De Viti–Barro equivalence theorem. The Ricardian equivalence is an economic hypothesis that holds that consumers are forward looking. Therefore, the budget constraints of a government are internalized by the consumers when they make their consumption decisions.

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- The expenditure of a government can be financed by it in two ways—imposing taxes and issuing of bonds. Considering the fact that bonds are after all loans, finally they will have to be repaid and this payment will most probably be done by increasing tax levels at a future date. Hence, the only choice is to impose taxes at that moment or impose them later. This is known as 'tax now or tax later'.
- It was in the year 1974 that Robert J. Barro came up with a theoretical foundation for Ricardo's speculation about which even Ricardo had been hesitant. Robert J. Barro possibly was ignorant of the earlier notion put forth by Ricardo and the later extensions added to it by De Viti.
- In the case of internal public debt, there is no direct money burden on the community as a whole since the payment of interest on the debt and the imposition of taxes to pay the interest involve simply a transfer of purchasing power from one group ofpersons to another.
- In the case of external public borrowing, the debtor country has to pay to the creditor country every year huge sums of money by way of payment of interest on loans.
- The term debt management refers to the formulation and implementation of a debt policy designed to achieve certain objectives. According to the traditional philosophy, debt management consisted of minimizing its interest cost and paying it off as early as possible.
- In a big country with a multi-layer government, effort must be made to ensure inter-government coordination. Care has also to be taken to ensure that their borrowing programmes and terms and conditions of loans to be raised do not come in conflict with each other.
- E. D. Domar provided the model of public debt sustainability assessment and states that, in order to offer the sustainability of public debt, its share of GDP should be, on the average and long term, deteriorating or constant.
- Both Harrod and Domar consider capital accumulation as a key factor in the process of economic growth. They emphasise that capital accumulation (i.e., net investment) has a double role to play in economic growth.
- Harrod-Domar model assumes a constant capital-output ratio. That is, it assumes a simple production function with a constant capital-output co-efficient.
- According to Harrod-Domar model, economic growth can be achieved either by increasing marginal propensity to save and increasing simultaneously the stock of capital, or by increasing the output/capital ratio.
- The major defect of the Harrod-Domar model is that the parameters used in this model, viz., capital/output ratio, marginal propensity to save, growth rate of labour force, progress rate of labour-saving technology, are all determined independently out of the model.

(vii) KEY TERMS

- **Public revenue:** It consists of the money revenue or income which the government is not obliged to return to the people from whom it is obtained.
- **Public debt:** It carries with it the obligation on the part of the government to repay the loan amount together with interest to the creditors from whom it has been borrowed.

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- **Productive debt:** It is that debt whose proceeds are spent by the government directly for productive purposes.
- **Voluntary debt:** Loans given to the government by the people on their own accord are called voluntary debt.
- **Compulsory debt:** It comprises those loans which are taken by the government by coercing the people by virtue of its sovereign powers.
- **Redeemable public debt:** It refers to that debt, the principal amount of which is repaid by the government after a predetermined period of time.
- **Unrequited exports:** Exports for which the country receives no payment from the foreign country are known as 'unrequited exports' and represent the direct money burden of an external public debt on the nation.
- **Debt management:** It refers to the formulation and implementation of a debt policy designed to achieve certain objectives.

(viii) ANSWERS TO 'CHECK YOUR PROGRESS'

1. Public revenue consists of the money revenue or income which the government is not obliged to return to the people from whom it is obtained.
2. When a country is engaged in war, it has to borrow heavily from the public. Modern warfare is so costly that the normal income of the state raised through taxation falls substantially short of the actual war expenditure. Besides, taxation beyond certain limits has disastrous consequences on production, and thus interferes with the most important objective during a war, namely, the winning of war. Moreover, a public loan is a better and easier method of collecting revenue than taxation.
3. Public loans differ from one another in many aspects. These differences are due to either the markets in which the loans are floated, the rate of interest offered on the government bonds, the conditions of repayment or the purpose for which they are used.
4. Productive debt is that debt whose proceeds are spent by the government directly for productive purposes.
5. The two important external sources of government borrowings are *first*, international financial institutions like the International Monetary Fund, the World Bank Group and the International Finance Corporation. The *second* external source of borrowing is the government assistance from friendly nations which is generally received for development projects.
6. The uniqueness of public debt lies in the fact that it has its 'revenue effects' as well as its 'expenditure effects'.
7. Government borrowing should not normally result in the curtailment of consumption because lending to the government, being voluntary, will be mostly met out of savings and not through reduction in consumption expenditure; only in case of war-time borrowing programme, substantial pressure is applied on the individuals to reduce their consumption in order to buy government bonds.
8. (i) Ricardo–De Viti–Barro
   (ii) imposing taxes; issuing of bonds
   (iii) Robert J. Barro

9. When the government spends the loan proceeds on development projects, it results in the creation of demand for several commodities and services. As a consequence, the prices of these goods and services rise, imposing additional burden on the society. This is the indirect money burden of an internal public debt.
10. Exports for which the country receives no payment from the foreign country are known as 'unrequited exports' and represent the direct money burden of an external public debt on the nation.
11. The term debt management refers to the formulation and implementation of a debt policy designed to achieve certain objectives.
12. Both Harrod and Domar consider capital accumulation as a key factor in the process of economic growth. They emphasise that capital accumulation (i.e., net investment) has a double role to play in economic growth.
13. Harrod-Domar model assumes a constant capital-output ratio. That is, it assumes a simple production function with a constant capital-output co-efficient.
14. The major defect of the Harrod-Domar model is that the parameters used in this model, viz., capital/output ratio, marginal propensity to save, growth rate of labour force, progress rate of labour-saving technology, are all determined independently out of the model.

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(ix) QUESTIONS AND EXERCISES

Short-Answer Questions

1. State the difference between public revenue and public debt.
2. Differentiate between private debt and public debt.
3. State the importance of public debts in the abandonment of the *laissez faire* and *laissez passer* policy.
4. What are voluntary and compulsory debts?
5. What are the sources of government borrowings from non-banking financial institutions?
6. State the effect of public debt on the national income.
7. What is the Ricardian equivalence?
8. Write a note on Ricardo and war bonds.
9. Under what headings can the burden of an internal public debt be discussed?
10. How can public debts be managed?
11. What are the conditions in Harrod-Domar growth model under which warranted growth rate equals the actual growth rate? Why is this model called a razor-edge model?

Long-Answer Questions

1. Discuss the differences between private debt and public debt.
2. Evaluate the importance of public debt.
3. Describe the classification of public debts.

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4. 'There are two important sources of public borrowings, viz., internal sources and external sources.' Explain.
5. Assess the various effects of public debt.
6. What does the Ricardian theory of equivalence propose? What are the problems faced by the theory?
7. Discuss the burden of public debt and its types. Also, analyse the term debt management.
8. Harrod-Domar model of economic growth tells that economic growth can be achieved either by increasing *mps* and stock of capital or by increasing capital-output ratio. Explain this proposition.
9. What is the central theme of the Harrod-Domar growth model? Outline Harrod-Domar model of growth and derive warranted rate of growth from the model.

(x) FURTHER READING

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UNIT III FISCAL POLICY IN A CLOSEDECONOMY

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Structure

3. Introduction
3.0 Unit Objectives
3.1 Instruments of Fiscal Policy: Tax, Borrowing and Expenditure
3.1.1 Usefulness of Fiscal Policy
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3.3 Summary
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3. INTRODUCTION

As an instrument of macroeconomic policy, fiscal policy has been very popular with the modern governments to influence the size and composition of the national product, employment, industrial production, prices, etc., in the economy. The deliberate use of fiscal policy as a means to achieve and maintain full employment and price stability in the economy has been a characteristic feature of the past seven decades after the publication of John Maynard Keynes' well-known book titled *The General Theory of Employment, Interest and Money* in 1936. The post-Keynesian popularity of fiscal policy has been largely due to the following three factors:

- Ineffectiveness of the monetary policyas a means of removing mass unemployment in the great depression of the 30s.
- Development of 'new economics' by John Maynard Keynes with its stress on the role of aggregate effective demand.
- Growing importance of government spending and taxation in relation to the national income and output.

From its modest beginnings in the 40s, fiscal policy today has become a major macroeconomic policy instrument employed by the governments to achieve full employment, to prevent inflation and to promote rapid economic growth.

Following Keynes, economists have argued that substantial amount of spending and fund raising in the form of taxation by government are capable of changing the size of national product and the tempo of aggregate economic activity in the system. By determining what goods and services will be produced, the fiscal operations of the government affect significantly the direction of employment of the economy's resources.

Government expenditure and tax revenue are not, however, closely related to one another. In any given year, government's total expenditure and total tax receipts may be unequal in which case the budget will be either a deficit or a surplus budget. When the

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expenditure and income of the government are equal, the budget is said be a balanced budget. The use of budget deficit and surplus in order to affect the level of the aggregate economic activity or to maintain economic stability or to promote economic growth in the economy is the essence of fiscal policy. Both the Keynesian and the neo-Keynesian economists rely primarily on the fiscal policy to stabilize the economy. During a major recession, such as the one which occurred in the 1930s, even the monetarists believed that fiscal policy could be used more effectively to increase the level of aggregate demand in the economy. In this unit, you will get acquainted with the concept of fiscal policy and its various aspects.

3.0 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss fiscal policy as an instrument of macroeconomic policy
- Describe government expenditure, tax income and public debt as important instruments of fiscal policy
- Assess the usefulness of fiscal policy and the roles of multiplier and accelerator
- Analyse the contra-cyclical fiscal policy
- Explain the crowding out effect

3.1 INSTRUMENTS OF FISCAL POLICY: TAX,BORROWING AND EXPENDITURE

In his epoch-making book *The General Theory of Employment, Interest and Money,* Keynes used fiscal policy when referring to the influence of taxation on savings and government investment spending financed through loans raised from the public. Keynes looked at it as a state policy which used public finance as a balancing factor in the economy's development. Ordinarily, by fiscal policy is meant a policy which affects the important macroeconomic variables—aggregate output, employment, saving, investment, etc., through the budgetary manipulation. Fiscal policy refers to the regulation of the level of government spending, taxation and public debt. According to Arthur Smithies, the term fiscal policy refers to 'a policy under which a government uses its expenditure and revenue programmes to produce desirable effects and avoid undesirable effects on the national income, production and employment.' According to Buehler, 'by fiscal policy is meant the use of public finance or expenditure, taxes, borrowing and financial administration to further our national economic objective.' According to Fred R. Glahe, by fiscal policy is meant the regulation of the level of government expenditure and taxation to achieve full employment in the economy. While referring to fiscal policy here we mean *pure* fiscal policy. A fiscal policy affects the level of government spending or taxation while the nominal money supply remains constant.

Government expenditure, tax income and public debt act as important instruments to influence aggregate outlay, employment and prices in the economy. A given change— increase or decrease—in aggregate government expenditure causes a change—increase or decrease—in the aggregate demand thereby increasing or decreasing the factor incomes. Government expenditure incurred on wages and salaries of its employees, interest paid on government debt, social security and old age pension payments, all tend

to increase the disposable personal income of people as a consequence of which the aggregate demand for consumer goods increases. Thus, an increase in the total expenditure of government tends to expand the aggregate economic activity in the economy. On the other hand, taxes levied on the people to finance government expenditure tend to reduce disposable personal and corporate incomes which could have been either spent on consumption or devoted to capital formation through saving. Thus, taxes tend to reduce the aggregate demand and income in the economy. These effects of government budget are equally valid for the Central, State and local government budgets although the budget of the Central government is much more powerful in affecting the level of aggregate economic activity in the economy than are the combined budgets of all the States and local bodies like the municipal and district boards.

Government expenditure and revenue can be combined in several ways in order to stimulate or depress the aggregate effective demand and economic activity in the economy. A surplus in the budget will exert a deflationary effect on national income because the inflow of aggregate government expenditure into the circular income flow will be less than the tax leakage from the circular income flow. Conversely, a deficit in the budget expands the net national product since the leakage from the aggregate income flow due to taxes is less than the additional inflow into the circular flow in the form of government expenditure. It follows, therefore, that in slump when there is need for expanding the aggregate demand deficit budget while in inflation when the problem is of preventing the aggregate demand from exceeding the aggregate supply, surplus budget should be prepared. This generalization should not, however, lead us to conclude that a balanced budget is neutral in its effects on the national income and economic activity in the system. Depending upon particular circumstances, a balanced budget may be no less important than an unbalanced—deficit or surplus—budget.

For a correct appraisal of the effects of government's fiscal policy on the level of aggregate economic activity, apart from the magnitude of government expenditure and revenue, their composition or structure is also equally significant. A given amount of revenue can be realized by the government in several ways—by levying taxes, by increasing the area of and profits from commercial activities and by borrowing from the public. However, even though the revenue raised through these several alternative methods may be the same, each method of raising revenue will affect the economy differently. For example, the same amount of revenue may be raised either through taxing the people or through floating bonds in the market but the effect of each one of these two methods of raising the government revenue will be different. Even in the case of taxes the effects will be different in the case of different tax levies like the income-tax and excise duty.

Similarly, the government can incur a given expenditure in several ways. It might, for example, spend upon building hospital or slum clearance or on the construction of a sugar mill or on unemployment doles. The effect on the level of aggregate economic activity will be different although the total expenditure is the same in each case. An expenditure of ` 5 crore incurred on constructing a new national highway or on slum clearance will not affect the aggregate investment activity in the private sector adversely; if anything, it will affect private investment favourably by causing an increase in the demand for raw materials and equipment needed for road construction or for housing the slum dwellers. But if the same amount is spent for starting a new sugar factory, it might cause an offsetting fall in the aggregate private investment by depressing the marginal efficiency of capital in the private sector. Consequently, the beneficial effects

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of public expenditure on the level of aggregate economic activity will be partially lost. Thus, a balanced budget is not neutral in its effects on national income and economic activity unless it is assumed that the composition of expenditure and income remains unchanged from year to year. Although the level of aggregate economic activity in the economy can be affected by varying the size of a balanced budget, the stabilizing effect of the fiscal policy depends largely on the size of the surplus or deficit in the budget. The extent to which fiscal policy can prove effective as an instrument of economic stability depends on the extent to which the government can vary the difference between the income and expenditure rather than upon the balanced budget and the change in its size.

As an instrument of macroeconomic policy, the goals of fiscal policy are likely to be different in different countries and in the same country in different situations. For example, while in a developed economy operating either at the full or at near-full employment level the goal of fiscal policy should be the maintenance of full employment while in a developing economy the main concern of fiscal policy has to be the promotion of economic growth with stability and reduction in the economic inequalities.

Broadly speaking, overall fiscal policy involves two types of important decisions. While one of these two decisions is related to the goal of full employment, the other is concerned with determining the social priorities. The second policy decision is concerned with the issue of allocation of economy's productive resources as between their different rival uses—should more resources be allocated for education, health care, public housing, slum clearance, transport, etc. The government expenditure on different items in any society will be determined by the prevailing social values.

Economists generally agree that fiscal policy should be employed to achieve full employment and economic stability in the economy. Before the great depression of the 30s, by economic stability was largely understood the stability of the general price level. The severity of the depression focussed attention on the need to remove unemployment and to employ fiscal policy for this purpose. The Employment Act of 1946 in the USA stated that it was the responsibility of the federal government to use all possible means, including fiscal policy, to promote maximum employment, production and purchasing power in the economy.

After the Second World War, inflation has become a worldwide problem. Consequently, economic stabilization has come to be widely defined so as to include the elimination of inflationary pressures in the economy. This means that the achievement of full employment and price stability should be simultaneously attained through the instrument of fiscal policy. At times, however, both these goals may be difficult to achieve as these might be mutually inconsistent. An economy which wants to achieve full employment must accept moderate price rise unless it resorts to price control, rationing and wage freeze policies.

3.2.1 Usefulness of Fiscal Policy

Budgetary or fiscal policy comprises steps and measures which the government takes both on the receipts and expenditure sides of its budget, including rules, regulations and procedures relating to them. To ensure its consistency with the overall economic policy of the government, its contents should not be selected in a piecemeal and haphazard manner. This frequently poses some difficult problems because some components of the policy may be contradictory to each other. The field of fiscal policy is not very clearly demarcated from those of monetary policy and debt management because they all make use of several common components but aim at different sets of goals. It is frequently

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maintained that fiscal policy should mean that segment of government's economic policy which concerns itself 'with aggregate effects of government expenditures and taxation on income, production and employment'. According to this limitation, the micro-level effects of various taxation and expenditure measures need not be included in fiscal policy proper. Mrs Hicks says that 'Fiscal policy is concerned with the manner in which all the different elements of public finance, while still primarily concerned with carrying out their duties (as the first duty of a tax is to raise revenue), may collectively be geared to forward the aims of the economic policy.' The crux of a good and effective fiscal policy lies in keeping its ingredients like expenditure, loans, transfers, tax revenues, income from property, debt management, and the like in a proper balance so as to achieve the best possible results in terms of the desired economic objectives. Discussion of individual taxation and expenditure measures is generally left out of the field of fiscal policy. But this is done only for the sake of simplicity of analysis. Essentially, a fiscal policy is meaningless unless necessary details are filled in.

Usefulness of fiscal policy lies in its facilitating the achievement of socio-economic objectives of the society. But it must not be forgotten that fiscal policy is only one of the several sets of weapons in the hands of the government. It should also be emphasized that fiscal policy tries to achieve its objectives by regulating the working of market mechanism (while in contrast, some other weapons may by-pass it). The extent of its success, therefore, largely depends upon the response of market forces to various policy steps initiated by the government.

Recognition

The fact that fiscal policy can be a potent tool in the hands of the authorities came to be recognized only slowly. For decades, both official and academic thinking favoured *laissez faire* and balanced budgets. This policy, obviously, had its own drawbacks. As Keynes pointed out, an attempt to balance the budget results in its imbalance and vice versa. The rationale and usefulness of fiscal policy came to be recognized only during 1930s and later. With the advancement of growth theory, it was also discovered that long run stability also contributes to economic development. With the popularity of planning and realization of the need for accelerating rate of capital accumulation, fiscal policy has been accorded an important role in underdeveloped countries also. There, it is directed not only to stability, but also towards promoting savings, investment and reduction in distributive inequalities and regional disparities. At the same time, on account of severe rigidities in socio-economic institutions and markets, the task of restructuring fiscal policy is far more difficult in underdeveloped countries. In such countries, there is a need to simultaneously direct it at several targets, which also poses additional problem of priority-mix and object-rating.

Fiscal Policy and Stability

The problem of stability refers to that of recurring cyclical phases of upward and downward cumulative movement in income, employment, output and prices, etc. in the economy. In an underdeveloped country, such an instability is mainly caused through pressures originating from abroad and imported through variations in imports, exports, and external resource flows. Recognition of a close relationship between price changes and the level of output and employment, particularly in developed market economies, has led some economists to claim that economic *stability should be interpreted to mean a steady non-inflationary economic expansion in output and employment*

coupled with a very mild rise in prices. It is argued that a very mild inflation enables an economy to achieve a continuous expansion.

Roles of Multiplier and Accelerator

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The development of the concepts of 'multiplier' and 'accelerator' and the relationship between the macro variables like investment, income, consumption, and savings enabled the economists to visualize the mechanics of trade cycles and the role which the fiscal policy could play in an economy. This gave rise to the principles of **compensatory finance and functional finance.** It was realized that, to a great extent, fiscal policy can be effectively used by the government to neutralize the destabilizing forces. The general theoretical framework of this reasoning is that a depression is caused by a deficiency of effective demand and fiscal policy can remedy it by increasing public expenditure and by encouraging private expenditure. Similarly, during a boom period, the need is to control the demand which again can be partly done through curtailing public expenditure and partly through curbing the private expenditure. Thus, Keynesian remedial scheme is essentially neutralizing changes in total **effective demand** by increasing it during a depression and decreasing it during a boom.

During a depression, public expenditure should be increased through incurring public investment and enhancing consumption expenditure of the government. Similarly, subsidies (with or without tax concessions) can be used to encourage private consumption and investment. The principle of balanced budget multiplier tells us that a net increase in aggregate effective demand can be achieved by simply expanding the size of public budget.

At this juncture, it is noteworthy that Keynes emphasized the role of fiscal policy (particularly that of public expenditure) to the neglect of monetary policy in fighting cyclical fluctuations and more so the chronic depression. In the process, however, he ignored the risk of government narrowing its 'fiscal space' (that is scope for budgetary manoeuvrability) on account of mounting public debt.

These days it is recognized that deficit financing is a very potent tool in the hands of the government for increasing effective demand. This is more so if the deficit is financed through creation of additional currency or borrowings from the central bank of the country. Even when the government borrows from the market and spends the borrowed sums, the aggregate expenditure is most likely to increase because during depression the investment opportunities in the market are not much and savings of the market get spent through the government. However, the government's expenditure policy is more effective when the extra purchasing power goes into the hands of those people who have a high marginal propensity to consume. Various social security measures like unemployment relief, old age pensions, and so on are, therefore, very helpful in raising the total demand in the market. Productive activity picks up faster and the existing unutilized capacity is put to use if the government expenditure is directed primarily towards consumption and welfare type disbursements without creating additional productive capacity. In that case, the economy would be able to recover from the depression throughthe multiplier process.

Check Your Progress

1. What is fiscal policy?
2. State how an increase in the total expenditure of government tends to expand the aggregate economic activity in the economy.
3. Why is the field of fiscal policy not clearly demarcated from those of monetary policy and debt management?
4. What did the development of the concepts of 'multiplier' and 'accelerator' enable the economists to visualize?

3.2 ANTI/CONTRA-CYCLICAL FISCAL POLICY

If fiscal policy has to be employed as an instrument of economic stability, it has to be contra-cyclical in nature. The government can contribute to raise the levels of employment,

income and economic activity by spending more than its current income. Conversely, it will exert a contractionary effect on employment, income and economic activity by collecting more revenue from the people in the form of taxes than it spends. To use its fiscal policy as an instrument of economic stability, the government should carefully regulate both the time and size of its spending and tax revenue operations. A deficit in the budget in inflation will further aggravate inflation and will, therefore, act as a destabilizing factor rather than act as a stabilizing factor in the economy. But the same policy if enforced in recession will promote economic stability in initiating recovery. Similarly, surplus budgeting in recession by aggravating the fall in the level of aggregate demand will convert a mild recession into a great depression. The same policy, however, if pursued during boom will promote economic stability in the system.

If fiscal policy is to be used as an instrument of economic stability, it is essential to abandon the current practice of balancing the budget annually in the face of fluctuating employment and income. The spending and revenue programmes of the government, which constitute the budget, must be flexible. Rather than balance its budget annually, the government should balance the budget over the period of a trade cycle. A fiscal policy that would contribute most to the economic stability must be such as to produce a surplus of revenue over spending in prosperity with comparatively full employment and a surplus of spending over revenue in a period of depression with abnormally high unemployment. This means that the annual budget should be kept unbalanced. A balanced budget would only be desirable when the economy was operating at full employment level and showed no tendency either to expand or to contract. The fiscal policy of the government should have a feature of automatic stability so that needless delays pending the passage of new appropriation or tax laws may not hamper the smooth operation of fiscal policy. It should have built-in stabilizers which will function automatically and shall remove delays in the execution of the fiscal policy in the absence of built-in stabilizers. The Committee on Economic Development stated the principle of guidance for incorporating the built-in stabilizers in the fiscal policy in the following words:

'Set tax rates to balance the budget and provide a surplus for debt retirement at an agreed high level of employment and national income. Having set these rates, leave them alone unless there is some major change in national policy or condition of national life.'

The merit of this policy is not difficult to see. With the fall in national income, government revenue falls relatively to government outlays leading to deficit budget and *vice versa.* As a built-in stabilizer, the fiscal policy cushion's the fluctuations by withdrawing more purchasing power from the economy than it injects in the economy during a boomand *vice versa*.

3.2.1 Automatic and Discretionary Changes

It may be inferred from the relationship between public expenditure and *GNP* and between taxation and *GNP* that a countercyclical fiscal policy would require increase in public expenditure and reduction in taxation to fight depression, and reduction in public expenditure and increase in taxation to control inflation. In other words, fighting depression would require a *deficit budgeting* and controlling inflation requires *surplus budgeting*.

Some of the budgetary changes are *automatic* and some are *discretionary*. The automatic budgetary adjustment takes place only when fiscal policy has built-in-flexibility. The automatic budget-ary changes should follow the change in *GNP*. Built-in-flexibility in the fiscal policy implies that as *GNP* falls, both income and consumption decline.

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Consequently, the revenue from both direct and indirect taxes declines. Government's planned and commit-ted expenditure remaining the same, public expenditure exceeds its revenue, and the budget automatically runs into deficit. This effect is more quick and powerful in the countries which provide unemployment allowances and other relief benefits.

When *GNP* increases, tax base expands and tax-revenue increases. Expenditure level remaining the same, the budget automatically shows surplus. The deficit and surplus resulting from fluctuation in *GNP* work as automatic stabilizers of the economy. It is, however, generally believed that automatic stabilizers prove to be adequate and serve useful purpose only for short-term fluctuations in the economy. Automatic stabilizers prove generally inadequate to control the economic fluctuations of larger amplitude. Under such condi-tions, discretionary changes in budget become necessary.

The *discretionary changes* in the budget refer to the changes in the tax-structure, and in the level and pattern of public expenditure by the government on its own discretion. Discretionary changes include change in tax-rate structure, abolition of existing taxes, imposition of new taxes, increasing and decreasing the public expenditure, changing the pattern of public expenditure, etc. Discretionary changes are so designed as to arrest the inflationary and defla-tionary trends in the economy and to mitigate the destabilizing forces, such as increase or decrease in aggregate demand.

Problems in Formulating Counter-Cyclical Fiscal Policy

Formulating a counter-cyclical fiscal policy is not an easy task. It involves certain complications, which should be borne in mind while devising the tax and expenditure policy to stabilize the economy. Some complications have been pointed out by Eckstein as follows.

- All expenditures do not have the same multiplier effect. For example, transfer payments by the government do not create a demand for goods and services. Some kinds of public expenditures (e.g., those on free education and hospital facili-ties) replace private expenditure.
- Not all tax-changes have the same multiplier effect. For example, taxes paid by the upper income groups have lower multiplier effect than those paid by lower income groups, because of differences in their *mpc*. The multiplier effects of indirect taxes are not clearly known.
- Deficit financing through public borrowing may reduce private investment through crowding-out effect. This kind of deficit financing reduces the multiplier effect.
- There are practical difficulties with regard to the assessment of time-lags and accuracy of forecasts. There is uncertainty with regard to effectiveness of fiscal policy.

3.2.2 Crowding-out Effect

When deficit spending by government is financed by creation of additional purchasing power in some form or other (including borrowing from the central bank of the country) and inflationary price rise takes place, real resources move out of the hands of the private sector and shift in the hands of the government. If this resource movement is substantial, the private sector may be 'crowded out' of the investment market, which means to say that it may not be able to sustain the level of its investment activity. This phenomenon of crowding out is strengthened by the fact that overall reduction of

resources for the private sector raises interest rates as well. Incentive to save more and reduce consumption expenditure by the private sector (to take advantage of higher interest rates) is counterbalanced, to a certain extent at least, by rising prices and reduced capacity to save. The net result is a downward pressure on investment invest activity by the private sector.

If the government finances its deficit spending only by borrowing, the net result is the same though with some difference in details. Thus, even when all borrowings are from the open market, and there is no inflationary impact of this policy, the very fact that resources get transferred from the private sector to the government spells out the results described above. Interest rates go up on account of reduced resource availability and there is a pressure on the private sector to move out of the investment market.

In the long run, public borrowings inflate budgetary expenditure because of 'debt servicing'. This, in turn, prompts the government to increase taxation or go in for further deficit spending. Thus, the earlier story of crowding out of private sector gets repeated.

3.2.3 Friedman's Crowding-out Analysis

Benjamin Friedman (1978) analyses the financial market aspects of the question whether Federal Government deficits crowd out private investment spending. His model assumes that: monetary policy does not accommodate the increase in the deficit; the economy is operating at less than full capacity (at full employment, additional debt financed government spending induces inflation and thus displaces some private spending); and that higher utilization rates induced by government spending do not have an 'accelerator effect' which would result in an increase in the desired capital stock. Friedman examines two financial market phenomena: transactions crowding-out and portfolio crowding-out.

To the extent that an increase in the fiscal deficit stimulates aggregate demand, it increases the demand for money to finance the larger volume of transactions, which raises interest rates, thus discouraging some private spending. This result is moderated to the extent that the demand for money decreases (the velocity of money increases) in response to the rise in the interest rate—so interest rates rise less—and the extent to which the demand for investment goods is insensitive to the rise in interest rates. Friedman's statistical estimates indicate that, in the short run, transactions crowding-out is minor, and although it increases in the longer run it discourages less than half of the potential fiscal impact of the deficit.

Portfolio adjustments can occur as a result of an increase in the deficit financed by government bonds sold to the public. Friedman's analysis, building on the work of Tobin, examines a model with three assets: money, government bonds and private capital ownership. This model is sufficiently general to yield ambiguous results of the portfolio adjustment effect of a deficit increase on private investment.

The public may respond to the increased volume of bonds in their portfolios by seeking to increase its desired holdings of cash or real capital. Increased demand for real capital tends to reduce the required return on investment, thus promoting real capital accumulation. In contrast, increased demand for more cash holdings tends to raise interest rates on government debt, making investment in real capital less attractive. The outcome depends on whether money or private capital ownership is the closer substitute for government debt. Portfolio crowding-out of private capital formation necessarily follows if investors view government securities and capital as perfect substitutes. Some Keynesian models, such as Blinder and Solow (1973), assume this is the case, but this assumption is

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shown to be neither theoretically nor empirically valid. On the other hand, portfolio crowding-in of private capital formation necessarily follows if an increase in wealth does not increase the demand for cash. But Friedman presents empirical evidence that wealth does influence money demand. Friedman emphasizes that there are no conclusive findings as to whether actual behaviour results in portfolio crowding-out or portfolio crowding-in.

However, Friedman suggests that short- and long-term government securities may have different relative substitutabilities with cash and capital—short-term treasury bills are perhaps more like money, while very long-term treasury bonds are more likely to provide investors with substitutes for long lived capital goods. To the extent this is the case, debt management practices that finance a deficit with very short-term rather than long-term securities would be less likely to crowd-out private capital investment.

3.2.4 Criticism of Crowding-Out

The term 'crowding out' is used loosely in popular discussions to convey the notion of a displacement of private investment by government borrowing at high interest rates. But this notion is misleading and the concept of crowding out is murky.

Because credit is scarce it is rationed by capital markets, and so even if government is totally absent from capital markets, some potential borrower is crowded out at any level of interest rates. More precisely, producers whose expected rate of return on new investment is less than their cost of borrowing to finance this investment, or consumers who delay their purchase rather than pay the cost of borrowing to finance present consumption, will be crowded out. Crowding-out thus refers to the financial market process of allocating limited credit to the users capable of paying higher prices. To the extent that the scarcity of credit is alleviated, for example, by an autonomous increase in savings, room is made for less profitable investment projects (or less desirable consumption expenditures) that would be crowded out if the supply of loanable funds were less abundant.

If the government were just another borrower in the credit market, its role would not be materially different from that of, say, AT&T, which because of the sheer size of its credit demands presumably displaces many small businesses. The unique role of the government in crowding out other potential borrowers does not, however, have to do so much with the size of its claims on the pool of available credit, as it does with (i) the fact that the government borrowing is interest rate insensitive, and (ii) the fact that the government borrows to finance predominantly activities that do not add to future productive capacity. In these two respects the government is indeed different from any other borrower.

The first distinction appears to imply that for a given supply schedule of loanable funds, borrowing by the government raises the interest rate thereby crowding out some marginal borrowers. However, several qualifications deserve mention in discussing this process of financial crowding out. First, if for instance, increased government borrowing finances a corporate tax cut, cash flows internally generated by corporations will increase and demand for credit by these corporations will decrease commensurately. Thus, increased borrowing by the government will coincide with decreased borrowing by the private sector. Second, insofar as the supply of savings expands as the interest rate rises, the amount of credit foregone by potential private borrowers will be smaller than the increase in government borrowing. Third, the concept of financial crowding out does not contain any normative implications; that is, for a given level of government spending

no general assertion can be made that financial crowding out is more deleterious to the economy than alternative methods of financing this level of government expenditures.

The implications of the second distinction between the government and other borrowers are more clear cut and also more important for proper evaluation of the consequences of government spending on credit markets. Since government spending is, from the standpoint of generating future growth, mainly non-productive, it pre-empts some resources which otherwise would have been used for investment purposes. Even though the lower rate of investment results from interest rate adjustments in the bond market, this result is not essentially a financial phenomenon. The reduction in investment reflects the resource allocation required when increased government expenditure demands compete with private investment and private consumption for limited amounts of labour, capital and other productive inputs. Pre-emption of these productive factors by the government is sometimes labelled real, as distinct from financial, crowding out and its effect on the economy in the medium term is the same independently of whether this pre-emption is financed by borrowing or by taxes. This conclusion may be altered, however, when incentive effects are recognized.

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3.3 SUMMARY

In this unit, you have learnt that:

- As an instrument of macroeconomic policy, fiscal policy has been very popular with the modern governments to influence the size and composition of the national product, employment, industrial production, prices, etc., in the economy.
- Government expenditure, tax income and public debt act as important instruments to influence aggregate outlay, employment and prices in the economy. A given change—increase or decrease—in aggregate government expenditure causes a change—increase or decrease—in the aggregate demand thereby increasing or decreasing the factor incomes.
- Taxes levied on the people to finance government expenditure tend to reduce disposable personal and corporate incomes which could have been either spent on consumption or devoted to capital formation through saving. Thus, taxes tend to reduce the aggregate demand and income in the economy.
- As an instrument of macroeconomic policy, the goals of fiscal policy are likely to be different in different countries and in the same country in different situations. For example, while in a developed economy operating either at the full or at near-full employment level the goal of fiscal policy should be the maintenance of full employment while in a developing economy the main concern of fiscal policy has to be the promotion of economic growth with stability and reduction in the economic inequalities.
- Budgetary or fiscal policy comprises steps and measures which the government takes both on the receipts and expenditure sides of its budget, including rules, regulations and procedures relating to them.
- The crux of a good and effective fiscal policy lies in keeping its ingredients like expenditure, loans, transfers, tax revenues, income from property, debt management, and the like in a proper balance so as to achieve the best possible results in terms of the desired economic objectives.

Check Your Progress

5. Fill in the blanks with appropriate words.
   (i) A deficit in the budget in inflation will further aggravate inflation and will, therefore, act as a ____ factor rather than act as a stabilizing factor in the economy.
   (ii) The spending and revenue programmes of the government, which constitute the budget, must be ______.
   (iii) ______ changes are so designed as to arrest the inflationary and deflationary trends in the economy.

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- The problem of stability refers to that of recurring cyclical phases of upward and downward cumulative movement in income, employment, output and prices, etc. in the economy.
- The development of the concepts of 'multiplier' and 'accelerator' and the relationship between the macro variables like investment, income, consumption, and savings enabled the economists to visualize the mechanics of trade cycles and the role which the fiscal policy could play in an economy.
- During a depression, public expenditure should be increased through incurring public investment and enhancing consumption expenditure of the government.
- If fiscal policy has to be employed as an instrument of economic stability, it has to be contra-cyclical in nature. The government can contribute to raise the levels of employment, income and economic activity by spending more than its current income. Conversely, it will exert a contractionary effect on employment, income and economic activity by collecting more revenue from the people in the form of taxes than it spends.
- A deficit in the budget in inflation will further aggravate inflation and will, therefore, act as a destabilizing factor rather than act as a stabilizing factor in the economy. But the same policy if enforced in recession will promote economic stability in initiating recovery.
- If fiscal policy is to be used as an instrument of economic stability, it is essential to abandon the current practice of balancing the budget annually in the face of fluctuating employment and income.
- It may be inferred from the relationship between public expenditure and GNP and between taxation and GNP that a countercyclical fiscal policy would require increase in public expenditure and reduction in taxation to fight depression, and reduction in public expenditure and increase in taxation to control inflation.
- When deficit spending by government is financed by creation of additional purchasing power in some form or other (including borrowing from the central bank of the country) and inflationary price rise takes place, real resources move out of the hands of the private sector and shift in the hands of the government.
- If this resource movement is substantial, the private sector may be 'crowded out' of the investment market, which means to say that it may not be able to sustain the level of its investment activity. This phenomenon of crowding out is strengthened by the fact that overall reduction of resources for the private sector raises interest rates as well.
- In the long run, public borrowings inflate budgetary expenditure because of 'debt servicing'. This, in turn, prompts the government to increase taxation or go in for further deficit spending.
- Benjamin Friedman (1978) analyses the financial market aspects of the question whether Federal Government deficits crowd out private investment spending.
- To the extent that an increase in the fiscal deficit stimulates aggregate demand, it increases the demand for money to finance the larger volume of transactions, which raises interest rates, thus discouraging some private spending.
- The public may respond to the increased volume of bonds in their portfolios by seeking to increase its desired holdings of cash or real capital. Increased demand

for real capital tends to reduce the required return on investment, thus promoting real capital accumulation.

- The term 'crowding out' is used loosely in popular discussions to convey the notion of a displacement of private investment by government borrowing at high interest rates. But this notion is misleading and the concept of crowding out is murky.
- Because credit is scarce it is rationed by capital markets, and so even if government is totally absent from capital markets, some potential borrower is crowded out at any level of interest rates. More precisely, producers whose expected rate of return on new investment is less than their cost of borrowing to finance this investment, or consumers who delay their purchase rather than pay the cost of borrowing to finance present consumption, will be crowded out.
- The reduction in investment reflects the resource allocation required when increased government expenditure demands compete with private investment and private consumption for limited amounts of labour, capital and other productive inputs.

3.4 KEY TERMS

- **Fiscal policy:** It refers to the regulation of the level of government spending, taxation and public debt.
- **Problem of stability:** It refers to that of recurring cyclical phases of upward and downward cumulative movement in income, employment, output and prices, etc. in the economy.
- **Discretionary changes in the budget:** It refer to the changes in the tax-structure, and in the level and pattern of public expenditure by the government on its own discretion.

3.5 ANSWERS TO 'CHECK YOUR PROGRESS'

- By fiscal policy is a policy which affects the important macroeconomic variables—aggregate output, employment, saving, investment, etc., through the budgetary manipulation. Fiscal policy refers to the regulation of the level of government spending, taxation and public debt.
- Government expenditure incurred on wages and salaries of its employees, interest paid on government debt, social security and old age pension payments, all tend to increase the disposable personal income of people as a consequence of which the aggregate demand for consumer goods increases. Thus, an increase in the total expenditure of government tends to expand the aggregate economic activity in the economy.
- The field of fiscal policy is not very clearly demarcated from those of monetary policy and debt management because they all make use of several common components but aim at different sets of goals.
- The development of the concepts of 'multiplier' and 'accelerator' and the relationship between the macro variables like investment, income, consumption,

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and savings enabled the economists to visualize the mechanics of trade cycles and the role which the fiscal policy could play in an economy.

(i) destabilizing
(ii) flexible
(iii) Discretionary

3.6 QUESTIONS AND EXERCISES

Short-Answer Questions

3.6.1 'Taxes tend to reduce the aggregate demand and income in the economy.' Is thestatement true? Give reasons for your answer.

3.6.2 'Overall fiscal policy involves two types of important decisions.' What are thetwo types of decisions?

3.6.3 Where does the crux of a good and effective fiscal policy lie?

3.6.4 What gave rise to the principles of compensatory finance and functional finance?

3.6.5 How can the economy recover from the depression through the multiplier process?

3.6.6 'If fiscal policy has to be employed as an instrument of economic stability, it hasto be contra-cyclical in nature.' Give reasons.

3.6.7 'Some of the budgetary changes are automatic and some are discretionary.' Describe briefly.\

3.6.8 Write a note on the crowding out effect and its criticism.

Long-Answer Questions

1. Discuss fiscal policy as an instrument of macroeconomic policy.
2. 'Government expenditure, tax income and public debt act as important instruments to influence aggregate outlay, employment and prices in the economy.' Explain.
3. Assess the usefulness of fiscal policy and the roles of multiplier and accelerator.
4. Critically analyse the contra-cyclical fiscal policy.
5. What are the automatic and discretionary changes in the fiscal policy? What are the problems associated with the formulation of counter-cyclical fiscal policy?
6. Explain the crowding out effect in detail.

3.7 FURTHER READING

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UNIT IV FISCAL POLICY IN AN OPENECONOMY

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4. INTRODUCTION

The previous unit dealt with fiscal policy in a closed economy, this unit will deal with fiscal policy in an open economy.

Compared to a closed economy, the open nature of the economy has distinct implications for the transmission mechanism of demand changes—as private consumption reacting to a tax change or government spending reacting to a tougher debt target. In the typical closed-economy macroeconomic model, a demand shock raises the interest rate, which in turn induces higher work effort and output by making current leisure more expensive. As stressed by Barro and King (1984), this interest rate movement crowds out the other sources of demand, preventing the positive co-movement of private consumption, investment and public spending as consequence of a shock to one of them.

Given heightened concerns about debt sustainability, many countries are implementing ambitious fiscal consolidation plans in which government spending reductions often play a major role. The usual presumption is that the effects of government spending cuts on output are smaller when a country conducts an independent monetary policy (IMP) than when constrained by membership in a currency union, reflecting that interest rate cuts and currency depreciation appear to dampen the adverse impact on aggregate demand. While econometric analysis (e.g. Ilzetzki, Mendoza and Vegh, 2010) supports this view, it is unclear whether an IMP retains its comparative advantage if constrained by the zero lower bound, especially in light of 'closed economy' analysis showing how a liquidity trap can amplify the government spending multiplier. This unit will deal with the relation between fiscal and monetary policy and exchange rate; deficit spending and its effect on exchange rate, price, export and import; and changes in tax rate and its effect on the movement of foreign capital.

4.0 UNIT OBJECTIVES

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After going through this unit, you will be able to:

4.0.1 Assess the relation between fiscal and monetary policy and exchange rate

4.0.2 Discuss the role played by the central bankers in the field of budgetary policies

4.0.3 Explain the effect of deficit spending on prices of financial assets and interestrates

4.0.4 Describe the effects of deficits on exchange rate, imports and exports

4.0.5 Analyse the changes in tax rates and its effects on the movement of foreigncapital

4.1 RELATION BETWEEN FISCAL, MONETARY AND EXCHANGE RATE POLICIES

Fiscal policy generally refers to the government's choice regarding the use of taxation and government spending to regulate the aggregate level of economic activity. In the same vein, the use of fiscal policy entails changes in the level or composition of government spending or taxation, and hence in the government's financial position. Key variables that policy makers focus on include government deficits and debt, as well as tax and expenditure levels.

Monetary policy refers to the central bank's control of the availability of credit in the economy to achieve the broad objectives of economic policy. Control can be exerted through the monetary system by operating on such aggregates as the money supply, the level and structure of interest rates, and other conditions affecting credit in the economy. The most important objective of central bankers is price stability, but there can be others such as promoting economic development and growth, exchange rate stability and safeguarding the balance of external payments, and maintaining financial stability. Key variables in this policy area include interest rates, money and credit supply, and theexchange rate.

While monetary and fiscal policy are implemented by two different bodies, these policies are far from independent. A change in one will influence the effectiveness of the other and thereby the overall impact of any policy change. Tensions can arise between what each will do to help smooth economic cycles and achieve macroeconomic stability and growth. That is why it is crucial to pursue a consistent monetary-fiscal policy mix and coordinate these (and other) policies as much as possible to avoid tensions or inconsistencies. This policy mix is a key component of the IMF's macroeconomic policy advice and of IMF-supported economic adjustment programmes, together with external, structural, and financial sector policies. In practice, imbalances in the budgetary position have in many cases proven to be a key element in both macroeconomic problems and their solution. For this reason, the IMF was sometimes jokingly said to stand for 'It's Mostly Fiscal', although in reality the macroeconomic problems countries are faced with generally consist of a broader mix of imbalances and require a broader set of policy responses.

How does fiscal policy affect monetary policy and thus the central banks? There are both direct and indirect channels. Starting with the first category, there are a number of ways in which fiscal policy may impinge on monetary policy. First and foremost, an

expansionary fiscal policy may result in excessive fiscal deficits, which may create a strong temptation for governments to resort to the printing press (i.e., monetary financing by the central bank) to finance the deficits. An expansionary fiscal policy, then, leads to an expansionary monetary policy, fuelling inflationary pressures, causing a possible real appreciation of the currency and hence balance of payments difficulties, potentially even resulting in a currency (and/or banking) crisis.

But even if governments finance their deficits in a non-monetary way, that is, through the markets, there may be cause for concern, specifically about crowding out: If governments take up (too) much funding in the markets, the result may be too little or too expensive credit for the private sector. This may harm economic development and growth, which would certainly be a concern of central bankers. On the external side, there is the risk that too much dependence on foreign funding of domestic debt results in exchange rate and/or balance-of-payments risks, which again would be worrying to central banks.

There is another, more direct channel of fiscal policy affecting central bankers and that is the impact of indirect taxes on the price level and thus on inflation. If governments feel forced to resort to substantial increases in indirect taxes—sales taxes, value added taxes—rather than taxes on various forms of income, this will have a direct impact on prices. The key concern here is that a one-off increase leads to a wage-price spiral and therefore permanent (higher) inflation and inflationary expectations.

In addition to these direct relationships between fiscal and monetary policy, there is the more indirect channel through expectations. Perceptions and expectations of large and on-going budget deficits and resulting large borrowing requirements may trigger a lack of confidence in the economic prospects. This may become a risk to the stability in financial markets. Such a lack of confidence in the sustainability of the financial position of the government may become a potential destabilizing factor on bond and foreign exchange markets, eventually even leading to the collapse of the monetary regime.

Impact of Fiscal Expansion

Conceivably, expansionary fiscal policy may at some stage become ineffective as a means to stimulate demand and, similarly, fiscal contractions may turn out to be expansionary. When economic agents realize that the government is borrowing too much for its own good, they will conclude that this can only lead to higher taxation levels in the future, and they may decide to compensate for that already now by saving more and consuming less. This so-called 'Ricardian equivalence' means that the financial behaviour of economic agents—on which central banks base their monetary policy decisions—depends on their perception of fiscal sustainability. It is, therefore, another example of how fiscal policy can (indirectly) affect the effectiveness of monetary policy.

It should be noted that the impact of fiscal policy on central bank objectives is not automatically avoided when the central bank is independent. Even when the central bank has independence, and hence is not submitted to the fiscal needs of the government, the need to offset the impact of expansionary fiscal policy on aggregate demand and inflation in the economy could prompt the central bank to tighten monetary policy, by raising interest rates or reducing credit in the financial system. The resulting high interest rates could depress economic activity, attract short-term and easily reversible capital in-flows—thereby adding to inflation and appreciation pressures on the currency, and eventually damaging macroeconomic and financial stability.

Severe budgetary problems may even lead to crises. There have been a number of examples of such severe tensions in the past, in which large and growing fiscal

deficits—in the absence of needed public sector reforms—led to high real interest rates. This intensified the government's debt-servicing costs, causing a build-up of short-term and foreign currency-linked public debt, thus increasing the sensitivity to interest rate, exchange rate, and rollover risks, which materialized as foreign capital inflows that had helped to finance the debt were suddenly reversed. Examples of this set of circumstances were apparent in the run up to the crises in Turkey (1994, 2001), Mexico (1994), Russia (1998), Brazil (1999), and Argentina (2001).

Even in countries where such extreme conditions did not materialize, the sustainability of the monetary regimes can be challenged by fiscal policies that are too accommodating. This has happened in the past, for example, Israel and Poland where expansionary fiscal policy caused an overheating of the economy, reviving inflationary pressures and worsening the current account. High interest rates—required to contain inflation—attracted capital inflows that complicated the implementation of monetary policy. Sterilization of capital inflows to keep inflation under check became increasingly difficult and costly for the central bank.

One of the channels of fiscal policy constraining the conduct of monetary policy include the impact of fiscal deficits on interest rates and interest spreads, particularly, for emerging markets. While the conventional theory argued that higher fiscal deficits raise intermediate and long-term interest rates, empirical studies revealed mixed results. Some studies established the impact of fiscal variables on country premiums, while other showed that the fiscal policy could constrain monetary policy through its impact on exchange rates. Under a high capital mobility and flexible exchange rate situation, deterioration in the fiscal situation could lead to a temporary appreciation of the exchange rate. In contrast, under low capital mobility, the exchange rate may depreciate, following higher imports and widening of the current account deficit on account of fiscal expansion (Zoli, 2005).

Financial Markets

Another area where monetary and fiscal policy come together is the development of financial markets. Both finance ministries and central banks have a strong interest in financial market development because: (i) it is indispensable for economic development and growth; (ii) it facilitates funding of deficits and debt; and (iii) it enables market-based operations by central banks. As part of financial market development, it is important for the authorities to engage in a discussion with (potential) market participants on market practices, conditions, and possible impediments.

The relationship between monetary and fiscal policy depends strongly on the development of financial markets. The transition from a rudimentary financial system to a fully developed system can be divided into four stages. In the undeveloped stage, there is no government debt outside the central bank, and fiscal deficits are essentially accommodated by money creation. In the next stage, marketable securities are introduced, but there is no secondary market and interest rates are inflexible. In the transitional stage, a secondary market for government debt instruments exists, interest rates have become more flexible, and central banks conduct more active and independent liquidity management. In the final developed stage, medium-term debt instruments are offered through auctions, interest rates are fully flexible, and central banks control liquidity in the markets through indirect and market-based instruments (e.g., repos). In particular, in the latter two stages, good coordination between the government's financial management (issuance of treasury bills, etc.) and the central bank's monetary policy operations is required.

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The Role of Central Bankers

What can central banks do about fiscal policy? First of all, coordination is very important. Even if central banks act on the short end and governments on the long end of the market, their financial activities should be coordinated. Second, communication is key as well. Central bankers expressing views on budgetary policies have become regular features in the international financial press, often in the context of presentations in Parliament and at presentation of reports on the economy. Of course, timing and frequency are important elements, and governors are not expected to issue statements each day. The effectiveness of the message will be affected by the stature and image of the governor and his or her institution.

In their messages, central bankers tend to focus on the medium-term sustainability of fiscal policy more than the short-term policies. This includes a focus on a solid and realistic budgetary process that (i) does not require frequent adjustments during the year (which tend to make markets nervous); (ii) is based on 'conservative' macroeconomic assumptions in particular with regard to economic growth (a key variable in any budget), but also with respect to interest rates, exchange rates, and exogenous variables such as energy prices; (iii) does not include too many one-off measures and open-ended commitments; and (iv) does not imply too many and too frequent fundamental changes in the tax regime (which might create uncertainty and inefficiencies). At the same time, they will focus on the bottom-line (i.e., deficits and debt) rather than on the specific line-items, to avoid being dragged into a very specific political debate. Last but not least, there appears to be a certain tendency among central bankers to 'lean against the wind', that is, to not to be too optimistic when things go well, and not too pessimistic when things take a turn for the worse, but rather to be realistic.

Medium-term Fiscal Frameworks

In recent years, an increasing number of countries have adopted formal fiscal rules. Central bankers are generally among the proponents of such rules, which can help fiscal authorities better withstand pressures for higher spending and slower fiscal consolidation. The rules, which are often focused on targets for deficits and debt, or on a multiyear spending timeline, are to be embedded in a medium-term fiscal framework based on balanced assumptions for macroeconomic developments.

Fiscal rules can be particularly helpful in cases in which there is no unique counterpart for the central bank, as is the case, for example, in the euro-zone, which is also faced with the issue of a new currency that has a limited track record. In order to enforce fiscal discipline and to ensure that national fiscal policies support the stability-oriented monetary policies by the European Central Bank (ECB), member countries adopted the Stability and Growth Pact (SGP) as a tool for fiscal policy coordination. The rules of the SGP aim at fiscal sustainability by strengthening fiscal discipline through requirements for budget deficits and debts and medium-term fiscal policy objectives.

Transparency

Finally, incorporating transparency into monetary and fiscal policy is key to their effectiveness. In this context, the IMF has developed two important international standards: the Code of Good Practices on Transparency in Monetary and Financial Policies for central banks and supervisors, and the Code of Good Practices on Fiscal Transparency for governments. These codes are important instruments to support clarity in discussions on the necessary coordination between monetary and fiscal policy.

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4.2.1 Exchange Rate and Monetary Policy

The exchange rate plays an important part in considerations of monetary policy in all countries. More generally, the exchange rate serves to buffer the economy from external shocks, such that monetary policy can be directed towards achieving domestic price stability and growth.

Under inflation targeting, monetary policy no longer targets any particular level of the exchange rate. Various measures suggest that exchange rate volatility has been higher in the post-float period. However, exchange rate flexibility, together with a number of other economic reforms—including in product and labour markets as well as reforms to the policy frameworks for both fiscal and monetary policy—has likely contributed to a decline in output volatility. In particular, exchange rate fluctuations have played a particularly important role in smoothing the influence of terms of trade shocks.

Both through counterbalancing the influence of external shocks, and more directly, through its influence on domestic incomes and therefore demand, the exchange rate has been an important influence on inflation. Under the previous fixed exchange rate regimes, the Australian economy 'imported' inflation from the country (or countries) to which the exchange rate was pegged. However, the floating of the exchange rate meant that changes in world prices no longer had a direct effect on domestic prices: Not only did it break the mechanical link between domestic and foreign prices, but it meant that the Reserve Bank was now able to implement independent monetary policy. Instead, under the floating exchange rate regime, movements in the exchange rate have a direct influence on inflation through changes in the price of tradable goods and services—a process commonly referred to as 'exchange rate pass-through'. The extent of this influence has changed since the float, and since the introduction of inflation targeting. In particular, exchange rate pass-through has become more protracted in aggregate, but is faster and larger for manufactured goods, which are often imported.

4.2 DEFICIT SPENDING AND ITS EFFECT ON MONEY STOCK, EXCHANGE RATE, EXPORT, IMPORT AND CAPITAL MOVEMENT

Deficit spending is the amount by which spending exceeds revenue over a particular period of time, also called simply deficit, or fiscal deficit, or budget deficit; the opposite of budget surplus. The term may be applied to the budget of a government, private company, or individual.

Check Your Progress

1. Name the key variables of the monetary policy.
2. What does an expansionary fiscal policy lead to?
3. State the important part played by the exchange rate in considerations of monetary policy in all countries.

4.2.1 Effect on Export and Import

Residents of a country can spend more than the value of their production only by absorbing another economy's goods, that is, through a current account deficit in the balance of payments. Thus, if a government increases its spending, without taxes or other measures to restrain private sector demand, imports are liable to grow relative to exports of goods and services, and the current account tends to deteriorate. A simple accounting relationship can be established between fiscal and external current account balances. Gross national income (GNI) can be defined in terms of expenditure components or income uses (Equation 9.1).

$$GNI = Cp + Ip + G + X - M = Cp + Sp + T + R \qquad \ldots(9.1)$$

where,

Cp = Private consumption

Ip = Private investment

G = Government spending

X = Exports of goods and services

M = Imports of goods and services

Sp = Private savings

T = Government revenue

R = Net current transfers to abroad

Rearranging,

$$(Ip - Sp) + (G - T) = (M - X + R). \quad \ldots(9.2)$$

Equation 9.2 shows the external current account balance as the counterpart of the sum of the private sector's investment-savings balance and the fiscal deficit. Thus, a fiscal deficit must be matched by a domestic private sector that saves more than it invests and/or by an external current account deficit.

Considerable caution is required in moving from the above accounting identity to the assumption that a simple causal relationship exists between fiscal and external deficits. A widening of the fiscal deficit may be reflected in an increase in the current account deficit, but it could also lead to a reduction in the private sector investment-savings balance through a crowding out of private investment (for example, when public and private investment are close substitutes, when the availability of credit to the private sector to finance investment is rationed, or when higher interest rates lower private investment). Similarly, an increase in the fiscal deficit may lead to a rise in the private savings rate, as individuals recognize that future tax burdens may be higher as a consequence of the need to service the prospective growth in public debt. Thus, the extent of linkage between fiscal and external deficits depends on any impact of fiscal policy on private sector savings and investment behaviour; moreover, fiscal deficits may respond to, as well as influence, external balances.

4.2.2 Effect on Money and Capital

Although the enactment of the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 has prohibited the Reserve Bank from participating in primary issuances of government securities, it is evident that large fiscal deficits can potentially lead to some form of monetization of debt. This is more important if large borrowings crowd out private credit and compel monetary authorities to provide greater liquidity through open market purchase of government bonds. This attenuates monetary policy efficacy.

India has made rapid strides towards phasing out the monetization of debt. For long, government deficits were automatically monetized through the issuance of ad hoc treasury bills. These bills of 91-day maturity were non-marketable instruments that were automatically issued to the Reserve Bank to replenish the central government's cash balances with it to meet the government deficit. This problem of automatic monetization was in addition to the financial repression caused by issuances of 91-day treasury bills 'on tap' (at a fixed discount of 4.6 per cent per annum), which were taken up mainly by banks for short-term investment or to comply with the requirements of maintaining the Statutory Liquidity Ratio (SLR). Financing government expenditure by issuing ad hoc

treasury bills to the Reserve Bank caused an increase in the reserve money. In addition, the Reserve Bank also rediscounted the tap treasury bills subscribed to by the banks, thus adding to the monetization.

Fiscal dominance of monetary policy goes beyond the monetization issue. It occurs in several forms. Large fiscal deficits have inflationary consequences even when they are not financed by the central bank. For instance, suppressed inflation remains a significant drag on inflation management even after the government has taken some steps to deregulate administered prices in the energy sector. At the first stage, suppressed inflation feeds into inflation as the subsidies necessitated by the price rigidity widen the fiscal deficit. At the second stage, as subsidies become unsustainable, they sooner or later necessitate large discrete price adjustment that feeds into inflation expectations. At the current juncture, if prices are adjusted in one go to remove total under-recovery of the oil marketing companies and prices of coal and electricity are adjusted upwards by a moderate 10 per cent each, the direct impact would increase wholesale price index (WPI) by 4 per cent. This suggests the persistence of fiscal dominance of monetary policy. In terms of the Fiscal Theory of Price Level (FTPL), fiscal dominance occurs in a weak or a strong form. In the weak form, fiscal dominance occurs when money growth rises to accommodate fiscal deficit and so exerts upward pressure on inflation. In the strong form, even if the level of money supply does not change in response to the fiscal gap, the latter independently raises the level of inflation because of its impact through aggregate demand. The weak form suggests that a central bank cannot target inflation because it cannot control money supply under the fiscal dominance. The strong form implies that inflation is not necessarily a monetary phenomenon and fiscal policy instead drives inflation.

4.2.3 Effect on Inflation

Inflation is defined as a sustained increase in the general level of prices for goods and services. It is measured as an annual percentage increase. There also is a large empirical literature on the link between fiscal policies and inflation in terms of both the short-term and long-term effects (Rother, 2004). The impact of high fiscal deficits on inflation is seen from two different angles. An increase in fiscal deficit would imply enhanced government spending, which could lead to an increase in aggregate demand and this could turn out to be inflationary if the economy is operating at or above potential level of output. Fiscal expansion, however, may not raise inflation in the short-run if the economic growth is below potential. It has been argued that the unprecedented fiscal stimulus that was used in India during the global economic crisis had no immediate impact on inflation as it primarily worked as a tool to partially offset the deceleration in consumption and investment demand (Reserve Bank Annual Report, 2009-10).

The short-term impact of the fiscal deficit on inflation could also depend on the mix of policies that the government plans to undertake for macroeconomic management. If the fiscal deficit increase is on account of a decrease in indirect taxes, like the reduction in excise duty for most manufactured products in India in the period immediately after the global crisis, this could have a dampening impact on final prices. Similarly, an increase in generic subsidies could keep prices below market clearing prices, thus making inflation suppressed in the short-run. Subsidies in the form of direct cash transfers to final consumers, on the other hand, could be inflationary in the short-run as increased demand may push up prices. The impact of a lower fiscal deficit on short-term inflation could also vary depending on how the reduction in deficit is achieved. If an increase in indirect

taxes is used as a tool to reduce the fiscal deficit, final prices could go up in the short-run. Reduction in generic subsidies could raise short-term inflation but would have a favourable impact on inflation in the medium-term.

Persistent fiscal deficits would sooner or later lead to the creation of money, which would have inflationary consequences. Sargent and Wallace (1981) argue that under conditions of fiscal dominance, inflation could turn out to be more of a fiscal problem. Empirical work exploring the link between fiscal dominance regimes and inflation has shown that governments often resorted to seigniorage (or inflation tax) during times of fiscal stress, which had inflationary consequences.

Studies that look at long-term trends try to establish to what extent large and persistent deficit levels have an impact on inflation. Short-term studies, on the other hand, focus on the impact of changes in fiscal policies, i.e., the impact of fiscal shocks on inflation. More recent theoretical developments based on the 'FTPL' suggest that medium- term price stability not only requires appropriate monetary policy, but also appropriate fiscal policy. This theory considers price level as the crucial adjustment variable to ensure the fulfilment of the government's inter-temporal budget constraint. This constraint equates, in real terms, the government's current liabilities to the net present value of government revenues, i.e., future primary surpluses and revenues from money creation. Under the condition that Ricardian equivalence does not hold and with a strongly committed and independent central bank, imbalances in the inter-temporal budget constraint need to beadjusted through shifts in the price level.

4.2.4 Effect on Exchange Rates

In an elementary Keynesian model, the exchange rate is tacitly determined by net exports. These net exports in turn are governed by the income tendency to import abroad and in the home country. When the capital account is not indicated in such a model, there is an expansion of aggregate demand with an increase in the government deficit. This deteriorates the trade equilibrium and results into a decrease of the national currency for a given domestic tendency to import. But since in this model an increase in the deficit also results in an increase in the interest rate, an advanced interest rate is allied with a weaker, not a stronger, currency.

The Keynesian model is different from other widely held notions especially in spheres related to finance—the relationship between exchange and interest rates and also between government deficits and exchange rates. These views that are different from that of Keynes is that derived from monetarist models of exchange rate determination. In the elementary monetarist model, the exchange rate relies on the proportion of money supplies of two different currencies per unit of production in the corresponding countries. Hence, the exchange rate is significantly a monetary phenomenon. In case where the money supplies are kept consistent and in any one country the fiscal growth invigorates the aggregate demand or incentives encourage higher aggregate supply, then the money supply per unit of production is brought down in this country and its currency would escalate. A decrease in the money supply in relation to the production can be interpreted as a current or expected reduction of prices, including the prices of exportables and import-competing goods. By enhancing the competitiveness of the country, it should enhance the trade balance through reduction in prices and would also result into a strengthening of the currency—just as in a Keynesian model. On the other hand, growth of production in conjunction with a non-accommodating monetary policy may be deduced as a liquidity squeeze causing higher interest rates that would

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encourage capital inflows from abroad and result in a currency rise.

Therefore, the monetarist model and analysis may result in a current (or trade) surplus and a capital account surplus. These results are discordant or we can say unsustainable over a longer period of time, since it is only through a capital account deficit that a current or trade account surplus can be financed. Furthermore, the monetarist model as against the Keynesian model, neglects the income effects on trade flows which is the focal point of the Keynesian model. When the assessment of the fiscal expansion combines these income effects in an elementary Keynesian model with a reduction in price and increase in the interest rate rooted in the monetarist models, the consequence is abstruse. Here, the income effects would have an inclination towards the worsening of the trade balance and also weaken the currency, the price effects would have an inclination to enhance the trade balance and thus strengthen the currency. The interest rate effects would tend to enhance the capital account and thus reinforce the currency even further.

The real effect of a fiscal expansion would then rely on the effectiveness of exchange rate responses to these effects. There are no dependable pragmatic evidence to back the argument that large government budget deficits result in an appreciation of the country's currency. Deficits tend to rise during periods of economic contraction and fall during expansion.

4.3 CHANGES IN TAX RATES AND ITS EFFECT ON THE MOVEMENT OF FOREIGN CAPITAL

In today's world, capital flow is becoming increasingly mobile and in such an environment it is difficult to implement taxation of capital.

With the internationalization of the financial market, there has taken place a higher and ever growing interdependence amongst the economies of the world. Specifically, it is possible that large international capital flow takes place because of a policy which has only affected the domestic savings-investment balances.

Gradually, the policymakers have recognized that the macroeconomic policies that they work with might be producing very important and major ramifications internationally. Rules related to tax and more so the ones which relate to taxation of capital income have the potential to powerfully affect all savings-investment balances and, thus, they can affect both the external current accounts and the international capital flows. Furthermore, with financial markets now being integrated, tax rules have become even more powerful in having an effect on the global allocation of both savings and investment, and in doing so they potentially modify the worldwide allocation of resources. Hence, now that the capital markets of the major industrial countries have become rather much integrated, if in one's country there is change in the structure of capital income taxes, it can lead to rather prominent implications for other countries' global efficiencies and even international capital flow. Due to all these reasons, there arises a prominent issue of cooperation and surveillance in not a domestic but an international perspective. Moreover, besides some exceptions of late, not much attention has been given to the probable international implications of domestic tax rules.

Governments of nearly every nation would like to have their country appear lucrative for foreign direct investment (FDI). Such investment is capable of increasing employment and growth, introducing new technologies, generating new jobs, to name a

Check Your Progress

4. Define deficit spending.
5. What is inflation? How is it measured?
6. State one difference between the monetarist and the Keynesian model.

few advantages. This will lead to a rise in the domestic income which gets shared with the government via taxation of wages and profits of foreign-owned companies, and probably certain taxes that are levied on business like a property tax.

There can be a positive effect of the FDI on the domestic income due to the various spillover effects like new technology being introduced and human capital being enhanced with rise in skills. In the light of such potential benefits, there is a continuous re-examination of the country's tax rules by the policymakers to ensure that they remain attractive for inbound investment. However, there are various complex issues that policymakers have to deal with. There are several questions that have to be addressed: To what extent is FDI sensitive to taxation? In what way should tax planning be factored in? Hence, policy considerations are key guiding factors for taxation on inbound and outbound investment.

Residing at the core of the question of what is considered to be the correct level of a host country's corporate tax burden lies the question of how FDI will react to taxation. Research that has considered cross-border flows of FDI has shown that at an average there is a 3.7 per cent decrease in FDI for every 1 percentage point increase in the tax rate on FDI. The actual figure has been seen by different studies to be different and the range for the figure is 0 per cent to 5 per cent. The variation is possibly due to the differences between the countries and the industries that were part of the studies, or possibly it would be the time periods under consideration.

Studies conducted in recent times have shown that there is an increasing sensitivity of foreign capital to changes in taxation. This proves the rising mobility of capital with the removal of non-tax barriers to FDI. Estimates of this nature could be employed for the purpose of assessing the long-run effect of corporate tax reform on FDI. To know the response given by the FDI to tax reforms, one has to know how FDI decisions make use of the tax factor for their decisions. Also, it is important to know how investors make use of tax rates.

Furthermore, the FDI response to reforms in tax will never be uniform and is dependent on several factors which are not easy to measure and account for.

Research conducted in recent years has shown that the sensitivity of FDI towards taxation is dependent on the host country and the mobility of business activities underlying the tax base. Specifically, in cases where companies gain the benefit of locating production in large markets for trade cost reduction, like cost of transportation, there will be some amount of inertia as far as the firm's location choice is concerned. There is benefit for the host country and some amount of capita fixity implies that to some extent taxing of profits will be possible without investment getting discouraged.

Furthermore, even according to the new explanatory models, there is a fall in the optimal tax rate on business when trade costs fall and there is greater mobility of capital. Such a view shows consistency with the observation that several nations place a lower tax burden on more mobile business activities like film production, shipping, or head-office activities.

Majority of the research on how tax reforms affect FDI have not considered the tax-planning strategies that investors employ for lowering their tax burden.

In the current global environment, tax competition for FDI is a real thing. It is a routine task for investors to make comparisons of tax burdens between countries that are similar as far as market size and location are concerned. It is suggested that the importance of tax as a consideration will increase when it comes to selecting a location

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for investment. It is now widely recognized that there is a rise in international tax competition, and that which was at one time seen to be competitive tax burden on business in a given host country is no more the same, post the various rounds of tax rate reductions in other countries. Nevertheless, not always can tax reduction pull in FDI. It has been seen that several Organization for Economic Cooperation and Development (OECD) countries that impose high effective tax rates in relation to other nations have succeeded in pulling in FDI. The reason for this stems from the market size and other attributes offered by the host country in attracting FDI as well as the profits arising from location that are taxed by the governments. If a country's FDI environment is unattractive and weak, even low taxes will not attract FDI. It has to be understood that in attracting foreign capital, one part is played by taxation and the other players are infrastructure, market access, conditions for investment, to name a few. Taxes, besides corporate income tax, also play an important role in attracting or repelling foreign capital; some of these are seriously considered during decision making energy taxes, payroll taxes and non-profit-related business taxes. Capital investors also consider the friendliness or otherwise the tax administration for business in the region they want to invest, such as the consistency, predictability, certainty and timeliness in tax rules' application, and often they play an important role similar to effective tax rate.

The tax burden for outbound investment is also a matter of concern. For some nations, neutrality of tax between outbound and domestic investment (both having equal tax burden) is an important aspect of planning. This is a core principle of the system of 'dividend credit' which means the taxation of foreign profits at domestic rates with a tax credit for foreign taxes is already paid on foreign profit.

Some governments reduce the rate of statutory corporate income tax since it is a simple method and is quick to observe. Investors find it directly relevant when they are looking for pure economic profits. It enhances tax efficiency when implemented in combination with reforms for a broader tax base and limits tax avoidance incentives.

Therefore, governments instead of reducing general tax provisions' burden, pointed out target tax relief to specific activity sectors for encouraging investment at lower foreign revenue costs. Some view the targeting of mobile activities as an attractive option. While there are nations that target certain activities based on their national industrial policy, there are others that target tax relief in case of market failure.

The treatment of tax for outbound FDI is also a concern for governments. Decisions that favour or waive off outbound FDI will cause raised mobility of capital and business calls for more lenient home country treatment.

Attempts are being made by governments to improve their business environment, providing improved tax administration through greater certainty and transparency in taxation. Advance ruling procedures have been put into effect by several countries so that tax authorities provide advance response to questions regarding the tax status of specific types of investment. For the treatment of cross-border investment, procedures for mutual agreement and tax treaties are key factors to stability and certainty.

Therefore, it can be expected to view further testing of the limits of tax competition, with greater decrease in corporate tax burden on inbound investment when viewed by policy-makers as unnecessary to attract investment, owing to host country attributes, and raising equity concerns. Countries go in for greater vigilance for limiting artificial shifting of tax base to no/low tax havens, for preventing imbalances in the global tax system. Various approaches for the treatment of outbound and inbound investment can be expected across countries, displaying different country circumstances.

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4.4 SUMMARY

In this unit, you have learnt that:

- Fiscal policy generally refers to the government's choice regarding the use of taxation and government spending to regulate the aggregate level of economic activity. In the same vein, the use of fiscal policy entails changes in the level or composition of government spending or taxation, and hence in the government's financial position.
- Monetary policy refers to the central bank's control of the availability of credit in the economy to achieve the broad objectives of economic policy. Control can be exerted through the monetary system by operating on such aggregates as the money supply, the level and structure of interest rates, and other conditions affecting credit in the economy.
- While monetary and fiscal policy are implemented by two different bodies, these policies are far from independent. A change in one will influence the effectiveness of the other and thereby the overall impact of any policy change.
- An expansionary fiscal policy leads to an expansionary monetary policy, fuelling inflationary pressures, causing a possible real appreciation of the currency and hence balance of payments difficulties, potentially even resulting in a currency (and/or banking) crisis.
- In addition to the direct relationships between fiscal and monetary policy, there is the more indirect channel through expectations. Perceptions and expectations of large and on-going budget deficits and resulting large borrowing requirements may trigger a lack of confidence in the economic prospects.
- One of the channels of fiscal policy constraining the conduct of monetary policy include the impact of fiscal deficits on interest rates and interest spreads, particularly, for emerging markets.
- Another area where monetary and fiscal policy come together is the development of financial markets. Both finance ministries and central banks have a strong interest in financial market development because: (i) it is indispensable for economic development and growth; (ii) it facilitates funding of deficits and debt; and (iii) it enables market-based operations by central banks.
- The relationship between monetary and fiscal policy depends strongly on the development of financial markets. The transition from a rudimentary financial system to a fully developed system can be divided into four stages.
- Central bankers expressing views on budgetary policies have become regular features in the international financial press, often in the context of presentations in Parliament and at presentation of reports on the economy.
- The exchange rate plays an important part in considerations of monetary policy in all countries. More generally, the exchange rate serves to buffer the economy from external shocks, such that monetary policy can be directed towards achieving domestic price stability and growth.
- Both through counterbalancing the influence of external shocks, and more directly, through its influence on domestic incomes and therefore demand, the exchange rate has been an important influence on inflation.

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- Deficit spending is the amount by which spending exceeds revenue over a particular period of time, also called simply deficit, or fiscal deficit, or budget deficit; the opposite of budget surplus. The term may be applied to the budget of a government, private company, or individual.
- Fiscal deficit may be reflected in an increase in the current account deficit, but it could also lead to a reduction in the private sector investment-savings balance through a crowding out of private investment.
- An increase in the fiscal deficit may lead to a rise in the private savings rate, as individuals recognize that future tax burdens may be higher as a consequence of the need to service the prospective growth in public debt.
- The impact of high fiscal deficits on inflation is seen from two different angles. An increase in fiscal deficit would imply enhanced government spending, which could lead to an increase in aggregate demand and this could turn out to be inflationary if the economy is operating at or above potential level of output.
- In an elementary Keynesian model, the exchange rate is tacitly determined by net exports. These net exports in turn are governed by the income tendency to import abroad and in the home country.
- When the capital account is not indicated in such a model, there is an expansion of aggregate demand with an increase in the government deficit. This deteriorates the trade equilibrium and results into a decrease of the national currency for a given domestic tendency to import.
- Although monetary policy is the dominant influence on inflation, the deficit (as well as changes in inflationary expectations, and exogenous supply shocks) has the potential for affecting the price level.
- Acceleration of money growth in an attempt to counter the upward pressure on real interest rates would prolong and accelerate the rate of inflation.
- With the internationalization of the financial market, there has taken place a higher and ever growing interdependence amongst the economies of the world.
- Gradually, the policymakers have recognized that the macroeconomic policies that they work with might be producing very important and major ramifications internationally.
- Governments of nearly every nation would like to have their country appear lucrative for foreign direct investment (FDI). Such investment is capable of increasing employment and growth, introducing new technologies, generating new jobs, to name a few advantages.
- Residing at the core of the question of what is considered to be the correct level of a host country's corporate tax burden lies the question of how FDI will react to taxation.
- Studies conducted in recent times have shown that there is an increasing sensitivity of foreign capital to changes in taxation. This proves the rising mobility of capital with the removal of non-tax barriers to FDI.
- In the current global environment, tax competition for FDI is a real thing. It is a routine task for investors to make comparisons of tax burdens between countries that are similar as far as market size and location are concerned.

Check Your Progress

7. Fill in the blanks with appropriate terms.
   (i) With the internationalization of the ______market, there has taken place a higher and ever growing interdependence amongst the economies of the world.
   (ii) In the current global environment, _________ for FDI is a real thing.
   (iii) The treatment of tax for ________FDI is also a concern for governments.

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- The tax burden for outbound investment is also a matter of concern. For some nations, neutrality of tax between outbound and domestic investment (both having equal tax burden) is an important aspect of planning.
- Countries go in for greater vigilance for limiting artificial shifting of tax base to no/ low tax havens, for preventing imbalances in the global tax system. Various approaches for the treatment of outbound and inbound investment can be expected across countries, displaying different country circumstances.

4.5 KEY TERMS

- **Fiscal policy:** It generally refers to the government's choice regarding the use of taxation and government spending to regulate the aggregate level of economic activity.
- **Monetary policy:** It refers to the central bank's control of the availability of credit in the economy to achieve the broad objectives of economic policy.
- **Current account:** It can be expressed as the difference between the value of exports of goods and services and the value of imports of goods and services.

4.6 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Key variables in the monetary policy area include interest rates, money and credit supply, and the exchange rate.
2. An expansionary fiscal policy leads to an expansionary monetary policy, fuelling inflationary pressures, causing a possible real appreciation of the currency and hence balance of payments difficulties, potentially even resulting in a currency (and/or banking) crisis.
3. The exchange rate plays an important part in considerations of monetary policy in all countries. More generally, the exchange rate serves to buffer the economy from external shocks, such that monetary policy can be directed towards achieving domestic price stability and growth.
4. Deficit spending is the amount by which spending exceeds revenue over a particular period of time, also called simply deficit, or fiscal deficit, or budget deficit; the opposite of budget surplus.
5. Inflation is defined as a sustained increase in the general level of prices for goods and services. It is measured as an annual percentage increase.
6. The monetarist model as against the Keynesian model, neglects the income effects on trade flows which is the focal point of the Keynesian model.
7. (i) financial market
   (ii) tax competition
   (iii) outbound FDI

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4.7 QUESTIONS AND EXERCISES

Short-Answer Questions

1. Why is it crucial to pursue a consistent monetary-fiscal policy mix?
2. What are the direct and indirect channels that affect monetary and fiscal policy?
3. What is the impact of fiscal expansion?
4. 'Both finance ministries and central banks have a strong interest in financial market development.' Give reasons.
5. Write a note on deficits and interest rates in a simple Keynesian framework.
6. In the case of imports and exports, what is a deficit?
7. What has led to the growing interdependence amongst the economies of the world?
8. Why do some governments reduce the rate of statutory corporate income tax?

Long-Answer Questions

1. 'While monetary and fiscal policy are implemented by two different bodies, these policies are far from independent.' Discuss.
2. Assess the relation between fiscal and monetary policy and exchange rate.
3. Discuss the role played by the central bankers in the field of budgetary policies.
4. Explain the effect of deficit spending on prices of financial assets and interest rates.
5. Describe the effects of deficits on exchange rate, imports and exports.
6. Critically analyse the changes in tax rates and its effects on the movement of foreign capital.

4.8 FURTHER READING

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UNIT V FISCAL FEDERALISM

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Structure

5. Introduction
5.0 Unit Objectives
5.1 Evolution
5.1.1 Rationale for Fiscal Federation
5.1.2 Financial Issues
5.2 Principles of Division of Financial Resources in a Federation
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5. INTRODUCTION

A country is said to have a federal structure if its government is a multi-tiered (also termed multi-level or multi-layered) one, that is, its government exists at two or more layers. In other words, it has a government with a territorial jurisdiction over the entire country (variously known as the Union, Central, Federal, or National Government), and one or more layers of sub-national governments. Each sub-national layer comprises parallel governments with their respectively demarcated territorial jurisdictions. Governments at sub-national levels are variouslyknown as State governments, regional governments, local governments and so on. The functional jurisdiction of sub-national governments at a given layer is significantly similar, but need not be identical to each other. In such a federal structure, inter-governmental relations have several components of which the component covering its financial dimensions is the subject matter of fiscal federalism.

The field of federal finance (or fiscal federalism) comprises:

- Inter-governmental (both inter-tier and across every sub-national tier) allocation of subjects (functions) having financial implications
- Inter-governmental (both inter-tier and across every sub-national tier) allocation of subjects (functions) of financial receipts and disbursements
- Inter-governmental (both inter-tier and across every sub-national tier) financial relations including sharing and transfers of tax and non-tax receipts, grants, loans and other forms of disbursements

For reasons of simplicity of presentation, it is conventional to consider the financial issues of a federal set up with only two layers of government, namely, the national and a sub-national, the latter layer is generally referred to as the State-level governments.

In this unit, you will get acquainted with the concept of fiscal federalism and its aspects.

5.0 UNIT OBJECTIVES

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After going through this unit, you will be able to:

- Discuss the concept of a federal structure and federal finance
- Highlight the evolutionary path, main features and reasons for inter-country variations of fiscal federation
- Explain the various financial issues of a federal set up
- Discuss the basic principles that should govern inter-government division of function
- Describe vertical and horizontal equity
- Assess the role of the Finance Commission and Planning Commission in the transfer of resources from the Centre to the States in India

5.1 EVOLUTION

Historical evolution of a federal set up normally follows one of the ***two alternative paths,*** namely, 'centralization' or 'unification' and 'decentralization'. In the former case, some States decide to form a union and have a 'national government'. To this end, they surrender some specified powers to it and retain the freedom of action and sovereignty in respect of remaining matters. For example, the State governments may surrender to the federal government subjects like defence, currency and foreign relations only, while retaining the remaining subjects. In this case, the federation is a creature of the States and, depending upon the constitutional set up, individual States may have the right of even breaking away from the federation.

In the second case, the national government of a country decides to create one more tier of sub-national governments for reasons of administrative efficiency and economy and shares some of its subjects with them and/or delegates some functions to them. The formation of such a federation reflects fissiparous forces in the country and a lack of harmony between interests of different regions. This tendency is more likely to be found in a geographically big country with a strong presence of regional differences. Federations are also suitable for those countries in which different ethnic and cultural groups occupy reasonably distinct geographical areas. This system of political organization enables these groups to maintain their identity and progress in their own ways, while still co-operating with each other.

Feature framework

Federal set ups are characterized by a variety of structural and other features. To an extent, they depend upon their evolutionary background, and the evolution of inter-governmental relationships. Generally, the constitution of a federation demands that that inter-governmental allocation of subjects and other related matters may be revised only with mutual consent of the parties involved.

One form of limiting the powers of one layer of government and assigning the balance to the other layer has been noted above where the federating States allow the Centre to deal with only some specified subjects. In another variety, the Centre delegates certain powers specifically to the States. In still other forms of federalism, the functions of *both* the States and the Centre may be specifically laid down. In this arrangement,

both layers of government may have some concurrent powers as well, such as, the concurrency of levying and collecting certain taxes. In India, for example, the functions and powers and the Central and State governments are as given in the Union List and the State List of the Constitution. In addition, the Concurrent List contains functions which overlap between the Central and State governments. However, Indian Constitution did not allow both the Centre and the States to tax the same base. Similarly, in some constitutions, as in India, the Centre may have the authority to abolish, create or re-define the boundaries of a State.

Converging tendency

Thus, we have a wide variety of federal structures in the world. However, they have collectively exhibited a tendency to converge to a set of core features. In most federations, functions covering the entire country have gravitated towards the Centre with functions with regional character going to States. In this way, even the unitary types of governments have moved along the path of 'decentralization', while the 'decentralized' federations have exhibited a tendency to strengthen their unitary features in certain spheres. Consequently no government, Central or State, remains completely sovereign and this is the basis and spirit of any federation. In other words, every federal set up is faced with the task of assignment problem, the exact contents of which keep changing over time. This problem concerns assigning both the functions and financial resources to each stratum or layer of the government on the basis of certain principles and/or historical reasons. In some cases, even political factors come to play their role in these decisions. *The efficiency of a federal set up, however, does not depend upon the formal constitutional provisions only. Far more important is the way the system is operated, the conventions followed, and the spirit in which the intentions of the constitutional provisions are honoured.*

5.2.1 Rationale for Fiscal Federation

Fiscal federalism recognizes the fact that modern governments are stratified and therefore, the problems arising therefrom must be studied and solved. However, a question arises as to whether there should at all be a federal set up in a country? Are there any theoretical underpinnings for it? Let us see the justifications for having such a set up.

1. Efficiency

One answer to this question lies in the complexities of a modern life in its various ramifications—political, economic, social and others. And it is found that there are various duties and functions which can be more efficiently performed only at a federal level, while there are others which are best tackled at the State or even local level.

In the extreme, there are some services which approach very closely the *pure* public goods and which have a good deal of externalities such as defence, currency, measures for economic stability and the like. The provision of such services should ideally be in the hands of the federal government rather than the State governments or local authorities. Similarly, those services which cover more than one State, such as inter-state transportation, communication, trade and commerce, are subjects which are better suited for the federal government. These public services are meant to be consumed by the entire population of the country, or the population belonging to more than one State, and to put these under the jurisdiction of any one State, or divide them between States is likely to create unnecessary complications. The reason is that, in such cases, the costs and/or benefits of the service in question obviously spill over the boundaries of

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a single State. It becomes difficult to have a proper cost benefit analysis of such a service, to have a unified decision making process and bring in a harmony between the cost recovery and the paying out of benefits. On the other hand, there are some public services, the exact need for which is most likely to differ from area to area such as sanitation, provision of drinking water, medical aid and the like. From the administrative and other viewpoints, such services should be left in the hands of the States and local governments.

In between the two extremes are those functions which pose a problem, and make it difficult to have a clear cut division between the Central and the State governments. These are those functions which can probably be handled efficiently by both layers of government. Moreover, with the passage of time, it is possible that a function which was left to the States (or Centre) is now found better suited for the other layer of the government. Such difficult cases would probably include education. Any division of such functions can be debated and questioned. In India, we have the Concurrent List of functions for both the Central and the State governments. In such cases, however, care must also be taken that there is no duplication of efforts and no serious gap is left.

2. Nature of Problems and their Solutions

In a big country, there is likely to be a lack of uniformity in the problems faced by different regions. The nature of their problems may defy a common solution. For example, each region has its own economic resources and potentialities as also the limitations which it faces. The problems of regional disparities assume particular importance in an underdeveloped country and need an immediate attention. And an ideal solution would be the one which is in harmony with the cultural, social and political values of the people. In a big country, or in a country populated by different social and economic groups, therefore, the ideal economic, political and other solutions will differ. It would be best, therefore, to have a diversified pattern to suit the regional and other requirements. A federal set up provides better scope for aspirations—social and economic—of different regions of the people to be translated into practice through the diversity that it permits in the set up.

5.2.2 Financial Issues

Government activities have their financial counterparts, generating financial receipts and disbursements. Therefore, in a federation, along with the political problem of division of functions between different layers of the government, the issues connected with financial arrangements have also to be sorted out. In other words, a federal set up is confronted with the twin issues of *diversity* and *equivalence in the context of provision of public services and their financing.*

1. Provision of Public Services

In the context of provision of public services, the former issue concerns the objective that in a federal set up, regional and local needs and aspirations should be satisfied to the extent possible. It implies that the level and composition of provision of public services in different regions should vary. Equivalence, on the other hand, means that no region or locality is to be discriminated against; that is, by itself the policy of the government should be to treat all regions on a parallel footing and variation in public services should reflect only their respective needs and aspirations. More particularly, it means that public services may be categorized on the basis of their national, regional and local applicability

and provided accordingly. Defence, for example, is a nation-wide service, maintenance of law and order is a regional one, and provision of street lighting, a local one.

(ii) Financing of public services

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As regards the financing of a public service, it is generally Stated that the power to spend should go along with the obligations and power to raise the necessary resources. This is considered more so because expenditure is a relatively pleasant duty of administration as compared with that of raising the revenue. It implies that a sound solution of the financial issues will ensure that the governments in a federal set up have clear cut tax bases which do not overlap. Between the federal government and the State governments, the tax power should be divided according to the identification of the tax bases while across the State governments, even the same bases may be taxed but only within their respective territorial jurisdictions. Thus, for example, if the federal government is imposing income tax, the State governments should not do the same. However, taxes like land tax may be imposed by all the State governments since here the territorial boundaries of one tax-levying authority can be distinguished from those of the others.

In practice, however, it is not always possible to avoid taxing the same base by two or more governments. And sometimes, another problem may arise in the form of what is termed as a tax competition. One State government may reduce or abolish certain taxes (such as sales tax) in order to attract trade and manufacture from other parts of the country. This type of competition is not always bad. Abackward State might find it a useful incentive to attract capital and thereby help in bringing about economic growth. Therefore, whether or not tax competition in any particular situation is unhealthy, will depend upon the merits of the case and no *a priori* generalization can be made in this connection. Economists who ignore the problem of regional disparities advocate the principle of *locational neutrality* according to which no region should be allowed to compete capital away from others. But as Stated above, this principle cannot always be justified. Within a country, poorer regions should be permitted to attract capital through fiscal concessions but the richer regions should not be allowed to do so. While assigning the functions and resources, the question of *economic stabilization* dictates that some heads should be reserved for the Central governments. These include, for example, regulation of the economy as a whole to protect it against fluctuations in income, employment, and output, correction of balance of payment deficits and surpluses, and regulation of international capital flows. By implication, subjects like money and banking as also credit regulation should be with the Central government. Similarly, there is the question of spill-overs. Any function or resource which covers more than one region should be with the federal government rather than with those of individual regions. Connected with the above is the principle of *fiscal equalization*. Allocation of the heads of functions and resources on the basis of above mentioned criteria and principles gives rise to the problem of *fiscal imbalance between the federal government and regional governments on the one hand and between different regions on the other.* ***These versions of imbalances become issues of vertical financial imbalance/inequity and horizontal financial imbalance/inequity***. This imbalance has to be solved by appropriate mechanism of *resource transfers.*

Another aspect of the problem of federal financial relations concerning *financial discipline* may be Stated as follows: To allow and expect a government to perform certain functions means expecting it to spend the necessary amounts. If the government is not able to raise the needed funds, it obviously cannot perform these functions. A limitation on the available resources is a limitation on its power to spend and hence

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perform that function. But to let it have resources without any legitimate controls and discipline is also not desirable. If, for example, the Central government agrees to finance all the specified activities of the State governments irrespective of the extent of expenditure involved, the State governments would tend to over spend. There would also be wastage and inefficiency. *This leads us to look for a need for rules and guidelines for allocating financial powers as between different government units.*

It may be added that the above issues generally do not yield a harmonious solution. The objectives connected with these issues come in conflict with each other and the authorities have to choose an optimum feasible path.

5.2 PRINCIPLES OF DIVISION OF FINANCIALRESOURCES IN A FEDERATION

Principles for efficient inter-government division of financial resources are as follows:

1. Efficiency

Different sources of public revenue can best be handled at different levels. Some sources of revenue are, by their very nature, national in character, while some are of regional or even of local character. For example, if we take the case of income tax, we find that to let this source of revenue be in the hands of State governments would create many anomalies and complications.

First, income tax rates and exemptions are likely to differ, if different States are given authority to fix their own schedules and exemptions.

Second, in a large number of cases, it will be difficult to demarcate the jurisdiction of various States in a clear cut manner. One can easily see the problems encountered in the use of direct taxes like income tax, gift tax, expenditure tax, etc. It is, therefore, thought best to assign such direct taxes to the federal government. There are similar other taxes which, because of their multiple association with different States, cannot be left in the hands of the States such as taxation of wealth, gifts, and inter-State trade transactions. Similar observations apply to custom duties.

Similarly, in a modern economy, a number of regulatory and protective financial powers have to be left with the federal government. One may mention here the currency and coinage, international capital flows, foreign aid, and the like. These things are assuming ever-increasing importance with expanding international economic relations.

In contrast, certain financial sources are better left with the State governments for efficient scheduling and collection. Examples may be given of land revenue, small scale and cottage industries, dairy farming, road transport, etc. Some sources of revenue should preferably be left in local hands; for example the income from water rates, house taxes, city transport and the like.

2. Economy

Like the canon of economy for the selection of the taxes, the assignment of various financial powers to different governments should also be with reference to the *economy in the cost of collection.* A non-economical and expensive way of collecting a revenue would be wasteful for the economy, and no economy is rich enough to waste its resources.

Check Your Progress

1. What does the historical evolution of a federal set up follow?
2. What are the twin issues confronting a federal set up?
3. What is locational neutrality?

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3. Desired Effects

Again it is found that a number of collective and other actions have to be taken which are of local nature and which vary significantly over different areas. The rates of house taxes, for example, need not be uniform in all cities. They are best decided by the municipal authorities themselves. In contrast, fiscal measures designed to bring about stabilization in the economy will be more effective if designed and implemented at the federal level. To protect the economy from a balance of payments disequilibrium and the like, a policy of customs duties can be helpful at the national level. Regarding the industrial policy designed to help the over all growth of the economy, it is the national action that is needed; but to reduce the regional disparities, State actions can also be employed. Thus, fiscal efficiency in terms of collections, and variations of coverage and schedules often point the way in which financial powers should be divided between different governments.

4. Adequacy

Seligman emphasized the criterion of adequacy when he said that 'the three principles that should guide in the allocation of revenue as among various tax jurisdictions are: the extent of the base of the system, the efficiency of administration and the adequacy of the revenue.' However, the adequacy of revenue should obviously refer to the adequacy of the *total* revenue availability to a government. And in a federal set up, even that may come in conflict with the criteria on the basis of which functions are assigned to different governments. *Of the two, these days, the efficient allocation of functions is given a priority and the financial adequacy is sought to be adjusted through inter-governmental transfer of resources.*

Criteria of Resource Division

As a general rule, however, we can mention a few basic criteria which should form the basis of dividing the financial resources between the federal and the State governments, as also between the State governments themselves.

- The tax coverage and tax schedules should avoid being discriminatory as between citizens of the same country residing in different States, unless of course, the over all national policy dictates so, say, on welfare grounds whereby resources ought to be transferred from the more advanced to the less advanced States.
- Assuming that there is no specific problem of regional imbalance, the tax structure should be as uniform as possible as between different States. The States should avoid unhealthy tax competition and should therefore not come into conflict with each other.

5.3.1 Financial Imbalance: Vertical and Horizontal Inequity

The foregoing discussion relating to inter-governmental allocation of functions and resources reveals the problem of imbalance at the aggregative level, as between the Centre and the State, and as between the States themselves. It is a complex case of imbalance at both vertical and horizontal levels, where the latter refers to imbalance between authorities at the same level of government. The details of this double-edged manifestation of vertical and horizontal financial inequity vary from case to case and thus defy any standard solution. In India, this double-edged problem gains further complexity because of a large variety of local bodies with widely divergent sets of functions to perform.

Let us first look at the imbalance at the aggregative level. It is highly unlikely that the duties (responsibilities) and financial powers would be in harmony at different levels of government. To begin with, it must be noted, that even for the economy as a whole, it is very unlikely that the needs and the availability of resources will match.

First, as Wagner and Wiseman Peacock hypotheses show, there will be an upward trend in public expenditure. The balance between the expenditure and revenue, even if it is attained once, is not likely to stay for ever. And Wiseman Peacock thesis supports this possibility in a much stronger manner.

Second, cyclical fluctuations and other disturbances in prices, income and employment, natural calamities and other emergencies etc., would cause an imbalance between the two.

Even if there is an overall matching of the resources with the needs, there is no reason to believe that such will be the case at local, State and federal levels separately as well. 'It so happens that the distribution of functions by performance criteria and of powers by economic allegiance tests do not lead to even a roughly satisfactory balance between own revenue and expenditure of most of the federations.' The nature of revenue resources best suited for one level of the government need not conform to the nature of the requirements of that level of the government. Similarly, even with similar financial powers, one State government may find them inadequate while the other may not. Actually, as we shall see below, there are chances that there will be quite a good deal of discrepancy, at least on welfare grounds. The discrepancy as between the resources available to the Centre and the States increases due to the fact that on account of efficiency, economy and other criteria the *Centre gets those resources which are relatively more elastic and buoyant in nature while the States are mostly saddled with relatively inelastic and less buoyant revenues.* Between the States also, various factors contribute to the discrepancy between their revenue resources. The level and composition of income in different States may vary widely. Those of them which have industries and services would be able to collect larger revenues, while those depending mainly upon agriculture will not be so fortunate. Similarly, the extent and intensity of trade, commerce, and allied services differ from area to area. Bigger commercial Centres are obviously able to lay their hands on more revenue than the areas which are backward in this respect. And peculiarly enough, the revenue *needs* of the economically advanced States are comparatively (as a proportion of the income of the State/region) lower. In less developed areas, there is an all-round need for improving social services, providing social overheads, improving health, establishing industries and the like. To put it differently, the marginal utility of each rupee spent by way of public expenditure in less developed States exceeds that in more advanced States. On the other hand, the marginal disutility of each rupee raised by way of public revenue is higher in the backward States.

Distributive justice is as much called for between regions of the same country, as between different members of the society. This justice implies that whatever be the level of governmental activity, the marginal disutility of taxation should be the same for different regions. And, similarly, the marginal utility or benefit of government expenditure should be the same. Since a backward region needs much larger amount of State services than it has at present, its marginal social utility from governmental services is far greater. In a backward region, therefore, the public expenditure should increase if need be, even by transferring the resources from the more advanced regions. Similarly, when it comes to collecting the tax revenue, it is relatively better off regions which should pay more because of the lower social marginal disutility or sacrifice of tax. Eventually, *inter regional*

justice demands that the richer regions should be taxed more and the tax collections should be transferred (partly) to and spent in the poorer regions. Though we are not able to measure the social disutility and social utility of taxation and public expenditure, still a reduction in glaring regional inequalities will certainly be helpful.

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It is very unlikely that the advanced States within a country will voluntarily agree to transfer adequate resources to the poorer States. For such a transfer, we should have a strong federal government with resources much larger than its own requirements (and a larger share of these resources should be coming from the more advanced regions of the country) so that it can transfer them to the poorer regions for their levelling up. A strong Centre is also needed for political integrity of the country, which again implies larger resource availability to the Central government.

5.3 FINANCE COMMISSION AND PLANNING COMMISSION IN RESOURCES TRANSFER FROM CENTRE TO THE STATES IN INDIA

India is a federal economy and in such an economy the policies of State revenue and expenditure are directly affected by policies relating to inter-governmental transfer. The optimum fiscal policy of a State is dependent upon the rules that transferring agencies apply to fund transferring to sub-national governments. The weightage assigned is affected by three things: Distance, deficit financing and revenue effort. When the optimum policy is compared with the actual State's own revenue and expenditure policies, it is seen that the expenditure of the States exceeds that level which is their estimated optimum level and their revenue collection is far below the estimated optimum level.

The State governments and the Central government have both been given their own specific powers by the Constitution of India for raising revenue independently and also spending it independently. There clearly exists a vertical imbalance in the power of taxation between the State and the Centre and this is clearly admitted by the Constitution. Since the State has higher responsibility for expenditure, it is directed by the Constitution that the Central government needs to transfer resources to the State. The purpose of these transfers is to bridge the gap that exists between the resources that the States themselves can raise and the resources required by the State to fulfill the responsibilities that they have been assigned.

In India, there exists a three-tier transfer constitutionally demarcated system which is a mechanism that allocates funds based on specific functions as specified in three separate mandates. In India, the Central government uses the channel of the Planning Commission, the Finance Commission and of discretionary transfers through various union ministries and agencies for the purpose of transferring the various funds. Low power of enforcing taxing power and high responsibility for managing the expenditure leads the governments of the States to be completely dependent on the Central government for resources. The transfer made by the Centre covers a major portion of the State governments' revenue.

India's Constitution states specifically the responsibilities and the roles the three tiers are to perform, and these are differentiated based on the issues of micro/macro nature. Let us take an example. Matters that are of national importance, like macroeconomic management, international trade, transportation infrastructure and defence

Check Your Progress

4. What is helpful in protecting the economy from a balance of payments disequilibrium?
5. What does distributive justice imply?

are solely the responsibility of the Centre. Following the provisions of the State list, the

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State holds responsibility to matters pertaining to State and regional importance, like local governments, agriculture, irrigation, housing, sanitation, public health and law and order. The third is the Concurrent list forming the final tier. This list pertains to sectors like bankruptcy and insolvency, education, contracts, social and economic social planning, employment and labour welfare, electricity, stamp duties and all other sectors which need consensus of the Centre and State.

In the Indian Constitution, there are 'quasi-federal' features that can be seen very distinctly. The Constitution seems to be biased, in both judicial and administrative arrangements, towards the Centre. The centripetal bias in fiscal policy has been mainly due to the passing on of all of the residuary powers to the Centre. With the passage of time, it has been seen that in the Indian system, the Centre-biased quasi-federalism has become deep rooted. In 1992, the 73rd constitutional amendment made provision for the statutory recognition of local governments and States. The amendment also provided a list of the functions and funding sources for the local bodies, both in the urban and rural areas. In addition, it was mandated that every State appoints a State Finance Commission for the allocation of taxes and fees to the local government as well as recommending the State's tax devolution and grants. Over time, there had not been any change or development in the Central-State fiscal relationship in the light of India's evolving fiscal set-up. It is believed that the Centre is fully aware of the welfare of the State. Furthermore, such institutions that the previous governments had established for the purpose of oversee division and allocation of funds are no more relevant to the current system of India.

5.4.1 Goals of Inter-Governmental Fund Allocation

Based on current literature, it can be said that inter-governmental fund distribution has two main purposes: Bridging the fiscal gap and balancing the inter-State capacities.

The main reason for the fiscal capacities being different between the State governments and the Union Government, or even from one State government to the other, is due to different capacities of different governments for taxation and responsibility for expenditure. In the current taxation and expenditure assignment system, it becomes impossible for States to maintain a balance between the expenditures they have to incur and the revenues that they can raise. Generally, this is termed as vertical fiscal imbalance. Because of a mismatch like this, it is required that that Centre allocates funds so that the inadequacy can be removed. Even with the augmentation of revenue at the State level, there has been a further rise in dependency. The reason for this is that though there has been steady increase of revenue, it is not fast enough to keep pace with the rising need of expenditure.

Besides vertical imbalances, there are also horizontal disparities that the States have to deal with. The degree of inadequacy varies from State to State. The reason for this is the lack of uniform tax base across the States. Adding to this is the fact that there is also a difference in expenditure from State to State. Since such a huge divergence exists, it is essential that balancing mechanisms be put in place in some form or the other.

Balancing of Inter-State Capacities

It is known that revenue as well as the spending requirement vary from State to State. If parity needs to be maintained, redistribution of the funds must take place. This phenomenon is well defined by Robin Broadway and Frank Flatters. According to them, for maintaining parity, it is essential that two persons who are equally well-off but living in different provinces, must remain equally well-off post taxation and the provision of public goods.

It is to say, though they are in two different provinces, they must have the same level of well-being. Hence, due to disparity in the States—any State that a person resides—persons who are equally well-off must not be deprived of enjoying the same level of well-being. This goes to address the horizontal disparity issue in some manner.

5.4.1 Fund Allocation Process

Since there is imbalance of a quasi-federal structure of government, there are four different channels through which the government transfer funds in India. There are mainly two commissions that are employed for the purpose of allocation. These are the Finance Commission and the Planning Commission. Another channel is via the Centrally Sponsored Schemes and funds; this channel is used for the purpose of some specific spending. Projects under such schemes work jointly via a cost-sharing mechanism between the Centre and the State. The last option for the States to obtain revenue is through borrowing from the market. Furthermore, for commercial banks, it has been made mandatory that they retain 35 per cent of the lendable resources that they have as more liquid assets (the Statutory 3 Liquidity Ratio). An example of such an asset is State government bonds. In this way, there is an incentive for banks to buy government bonds.

1. Finance Commission

The responsibility for allocation of funds of the Finance Commission is just limited to non-plan current expenditures because of the Planning Commission performing similar functions.According toArticle 280, every five years, the Finance Commission is appointed by the Prime Minister. The following steps are involved in the transfer of funds by the Commission: (i) Making an estimate of the overall available budget based on the Union's and State's total resource requirement, (ii) Making an estimate of the States' current revenues and non-plan expenditures, (iii) Making an assessment of the proportion of proceeds from Central tax which will go to the States and distributing this amount amongst the States, and (iv) Making available Grants-in-Aid to bridge any existing gaps between revenue and non-plan current expenditure. In step (iii) the transference of tax proceeds is there for the purpose of handling the horizontal and the vertical imbalance. The transference act itself addressed vertical imbalances and weights assigned to specific key factors help in the correction of horizontal imbalances. The main purpose of the transfers is economic efficiency and discouraging financially initiated migration within the country. In the Thirteenth Finance Commission (FC-XIII), four specific criteria have been employed for the transference of four taxes: Population, area, fiscal capacity distance and fiscal discipline.

(i) **Population:** Population as a factor aims at making certain that there is equity across all States. As population rises, so do needs. The assumption is correct that the State that has more population needs more funds to ensure that residents receive comparable degree of public goods as in other States. Aweight of 25 per cent for population has been assigned by FC-XIII.

(ii) **Area:** Area as a factor aims at equity by taking into consideration the varying cost disability of different States. A State that is larger in size will need to have more spending as far as administrative costs for public service delivery are concerned. In line with this rationale, there is a 10 per cent weight given to this criterion.

(iii) **Fiscal capacity distance:** Fiscal capacity distance as a factor has its basis in the principle of raising efficiency. Its aim is to incentivize States to increase tax efforts

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while taking into account the fiscal disadvantages of the States. The weight for fiscal capacity distance has been fixed at 17.5 per cent by FC-XIII.

(iv) Fiscal discipline: Fiscal discipline is based on the fact that besides resources being distributed equally, it is also of key importance to reduce their inefficient utilization. It is, therefore, recommended by the Commission that there should be rewards for the prudent utilization of resources. FC-XIII has assigned a 17.5 per cent weight to fiscal discipline and this percentage is more than that provided by the previous Commission by a whole 10 per cent.

2. Planning Commission

While the Finance Commission aims at fiscal equalization, the Planning Commission is more development oriented. The Planning Commission transfer funds so that the States' fiscal capacitycan be increased. Such fund transfer is done via two specific mechanisms—grants and loans. Previously, the components of these mechanisms were mainly project-based. Nevertheless, after 1969, the Gadgil formula is employed by the Planning Commission. The Gadgil formula has been revised on various occasions and the version which is in use at present is referred to as the National Development Council (NDC) revised Gadgil-Mukherjee Formula. In case of special category States, the process of transfer is not the same as that used for other major States. All of the 11 mountainous States of North and North-East India together form a group of special category States. Of these, seven states have received this status because of their distinctive economic requirements and capacities. Of the total funds, 30 per cent is allotted to these States by the Planning Commission. Out of the 30 per cent, 90 per cent is sent out in the form of grants and the ten per cent that remains is used to provide loans. Of the total funds, 70 per cent are kept for the rest of the States and the Gadgil-Mukherjee Formula is employed for their distribution.

Since independence, the fiscal linkages of India have remained mostly unaltered and over the years, these linkages seem to have possibly further cemented. The debate and the struggle between the Centre and States has become more and more intense over the years. Though several arguments have been put forth against the system presently in use, those that are more significant seem to target a single basic problem and it is this specific problem that has stood as a hurdle to this relationship's reformation and it being able to modernize and evolve with changing time and economic environments.

In simple words, it is politics which is the basic problem. Politics lay a huge strain on the relationship, and more so on those States which are represented by parties in the opposition or those States that have fallen out of favour of the Centre. Also, the allocation of funds is used as a means to entice parties to join or align with certain political alliances and it is also being used as a punishment by holding back funds from persons who are in opposition. Another argument that is majorly employed against the relationship that exists presently is that it lays too much emphasis on need-based fund allocation instead of fund allocation on merit basis, and this makes the well-performing States disillusioned. Moreover, certain States have been allocated special status and there is decentralization of decision-making with regard to allocation of funds for economic activities and these are all points of contention.

5.4.2 Criticism of the Federal Finance Structure of India

The federal finance structure of India is heavily criticized due to the following three critical issues:

- States have no allocation autonomy for funds that the Centre disperses.
- Fund allocation is not merit-based but need-based.
- Fund allocation is used as a political tool.

1. States Lack Allocation Autonomy on Funds

The practice for some certain allocation of funds to the States is based on schemes, and these schemes come with their own guidelines for the utilization of the allocated funds. Most of the times, these funds are named after political leaders and are made available for States for only certain specific purposes and issues which are believed by the Centre to be vital for the State, and this many a times circumvents the real requirement of the States.

For a State government, it is imperative that it represents the demands and the needs of the local population and by this virtue, in most cases, they are a better judge of the importance/relevance of an issue. Therefore, the States argue that without autonomy deciding on the usage of such funds leads to huge quantities of resources often times getting diverted to such activities which do not prove to be of any benefit to the local population. They are also in the long run not beneficial for the Centre. Hence, it is proposed by several State governments that they should be provided autonomy in the allocation of funds flowing from the Centre. Such autonomy will enable the local government body to select and decide the most critical and pressing issues to which the resources and funds must be allocated instead of the allocation being forced upon them from someone outside the local system who may not understand the actual requirement. In cases where there is no autonomy, the trend will continue where the funds are diverted to such programmes and schemes which might not prove to be of any benefit to the intended segment of population or the State, and this will in effect be both a waste of precious resources and a means of nurturing misuse, bribery and corruption.

2. Merit-based Allocation and Need-based Allocation

In the allocation of funds to sectors such as employment and education, the government adopts a practice which is fundamentally based on need but not merit. With fiscal linkages and transfer, a completely reverse method is employed. The basis is that those States that are performing the worse need to be provided with fund allocation preference over States that are performing better. There is an argument opposing this which says that such States that are performing better feel that their better performance and their better contribution to the nation's revenue is not being rewarded but is being punished.

This method of fund allocation is being justified based on the theory that if funds are made available to such States that fall in the need-based model, then such funds will spur and even generate economic activity. Nevertheless, it is thought by States that if resources are invested in such economic activities that provide healthy returns, there will be a continuation of the positive cycle, creating over time a greater surplus and a decrease in the need for the Centre allocating funds. Yet, in such States whose economic performance is not good, this is impossible to attain where the funds from the Centre are being employed for other purposes which are not providing returns.

Finally, the argument becomes one which is fought between long-run gains and short-run gains. In case of the short-run outlook, reinvestment in any economic activity which is healthy would lead to that activity generating increased returns, and this will enable the State in becoming less dependent on the government for fiscal transfers. The

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other side of this argument remains that investments made in sickly economic activity or under-performing States will spur economic growth and boost returns. It is in the second theory that the real problem lies. Long-run investments due to which there is a spur in economic growth are subject to a huge number of variables that are needed for a sector's revival. Of all the reasons for this under performance of the States that lead to the need for long-term investment, one reason might be systemic problems within the State, and putting in more and more resources could just be adding to the existing problem.

For reviving economic activity at such a scale and getting the sector to reach a level that makes it self-generating would most probably need investment for several years. The problem that is attached with the long-run concept is also that if funds are moved to activities that are less economically healthy, the Centre will be moving funds out of such programmes that are actually successful. For Central transfers, the primary goal must be the creation of such an economic system which has lower dependence on Central accounts than it had in the previous year. There is a heavy bias against merit-based allocation of 7.5 per cent and 17.5 per cent of total weight for the Planning Commission and the Finance Commission in the methodologies adopted by them. Yet, this does not prove that there is no need for need-based allocation. Nevertheless, long-run investments to revive economies over short-run investments to boost positive performance will keep not only the need-based States dependent on Central funds but may also bring the better performing States back into the fold of dependency.

3. Allocation: A Political Tool

The highest criticism that is made of the Central-State fiscal linkage resides in the fact that a huge number of times, the relationship is dependent on what kind of political relationship is shared by a State with the government at the Centre. Oftentimes it is true that in case the State is governed by a party that does not have a good relationship or is not in alliance with the political party at the Centre, the State stands to lose as it is not provided much favour or priority in comparison with such States which are inclined and aligned politically with the Centre. Despite the fact that the equation which is employed for fund allocation as well as the Finance Commission's mandate are non-partisan, still there is regular occurrence of political favouritism. Any State which is under the rule of the opposition has less probability of getting special funds or special status in comparison to such States which are under the rule of the same party which is also ruling at the Centre. Furthermore, States are given special funds and special status so that their political alliance can be obtained.

5.4.3 Criticism of the Planning Commission

Policy makers and experts have again and again, raised questions regarding how relevant is the role of the Planning Commission. There are other commissions which exist and perform the duties of the Planning Commission, hence the policy makers and experts believe that it is unwarranted that the Planning Commission also continues. While the debate has just begun questioning as to how relevant the Commission has remained, it has now become larger and now has gone so far as to ask for its total mandate reform and even dismantling it.

'Since the Planning Commission has defied attempts to reform it to bring it in line with the needs of a modern economy and the trend of empowering the States, it is proposed that the Planning Commission be abolished,' the Independent Evaluation Office had said in a report.

Following are some of the criticisms that are made against the commission:

5.4.3.1 To begin, it is said that the basis for the creation of the Planning Commission was of setting up of such an organization that would formulate economic policy for those States of the Indian Union which were newly formed and economically weak. It would be the one to coordinate between ministries and government institutions, and it would be the unit which covered all those areas which were not overseen by any specific ministry. With the passage of time, there has been tremendous change in the economic status of States, because of each State's functioning economic units. Hence, there has been a transfer of the needs for policy formulation to planning boards and State governments from the Commission. Furthermore, in 1951, when the Planning Commission was established, several economic activities like earth sciences, shipping, atomic energy, corporate affairs, steel and development were under direct charge of the Commission and not represented by a specific ministry. Now, there are specific ministries that look after such activities and due to this there has been a reduction in the mandate of the Commission. The specific ministries oversee the strategy, planning, coordination and implementation within specific sectors.

5.4.3.2 The second point is that the Finance Commission already holds the responsibility of formulating and calculating the equation which is applied to allocating and transferring, and it is extremely well suited to take care of the allocation too. Thus, there seems to be little use or purpose of one additional 'independent' authority, more so when there is already a separate commission which handles the task of designing and implementing financial transfers.

5.4.3.3 The third point is that of the proximity and association that the Planning Commission has with the Central government. It appears to be a fact that the appointment of the organizational head of the Commission is a politically motivated nomination. This by itself, since there will be political bias, renders the Commission non-independent when it comes to taking Centre-State fiscal decisions. Since the Commission will have political leaning, resource allocation will even more become a tool for political gain applied as reward or punishment towards States based on the present political alignment of the State.

5.4.3.4 The fourth point is that when the Commission was formed, the vision was that the Commission would employ the services of policy maker experts in the process of decision-making with respect to creation of schemes and allocation of resources. In the present times, the Commission does not actively encourage this policy and the offices and ranks in the omission are all filled in by political appointments and by senior bureaucrats. According to the Commission's original mandate, it was supposed to advice the Prime Minister's Office (PMO) on the varied and various developmental issues having taken expert opinions of domain specialists, and specifically regarding such issues that the Central Government's decision-making officials may not understand easily. In the original mandate, the Planning Commission was also required to perform both in-depth research and analysis for scheme and policy creation for the nation and also provide criticism as far as activities of the Centre were concerned. Currently, there is a shift in the Commission's mandate and it is now seen to support the government's policies and claims under every condition even if far removed from ground realities.

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- Last, it can be seen that the Commission employs methods that are outdated for the purpose of calculation of allocations and policy creation and these are neither in line with the contemporary economic systems nor with the recipient and stakeholder needs. When in-depth research and analysis is missing, the only role that the Planning Commission is playing in policy formulation lacks any sort of alignment with economic realities and is in a way also obsolete.

5.4 SUMMARY

In this unit, you have learnt that:

5.4.1 Historical evolution of a federal set up normally follows one of the two alternative paths, namely, 'centralization' or 'unification' and 'decentralization'. In the former case, some States decide to form a union and have a 'national government'.

5.4.2 In the second case, the national government of a country decides to create one more tiers of sub-national governments for reasons of administrative efficiency and economy etc., and shares some of its subjects with them and/or delegates some functions to them.

5.4.3 Federal set ups are characterized by a variety of structural and other features. To an extent, they depend upon their evolutionary background, and the evolution of inter-governmental relationships.

5.4.4 Fiscal federalism recognizes the fact that modern governments are stratified and therefore, the problems arising therefrom must be studied and solved.

5.4.5 A federal set up provides better scope for aspirations—social and economic—of different regions of the people to be translated into practice through the diversity that it permits in the set up.

5.4.6 A federal set up is confronted with the twin issues of diversity and equivalence in the context of provision of public services and their financing.

5.4.7 In the context of provision of public services, the former issue concerns the objective that in a federal set up, regional and local needs and aspirations should be satisfied to the extent possible.

5.4.8 Economists who ignore the problem of regional disparities advocate the principle of locational neutrality according to which no region should be allowed to compete capital away from others.

5.4.9 Allocation of the heads of functions and resources on the basis of above mentioned criteria and principles gives rise to the problem of fiscal imbalance between the federal government and regional governments on the one hand and between different regions on the other.

5.4.10 Different sources of public revenue can best be handled at different levels. Some sources of revenue are, by their very nature, national in character, while some are of regional or even of local character.

5.4.11 Different sources of public revenue can best be handled at different levels. Some sources of revenue are, by their very nature, national in character, while some are of regional or even of local character.

5.4.12 Certain financial sources are better left with the state governments for efficient scheduling and collection. Examples may be given of land revenue, small scale

Check Your Progress

6. State the purpose of the transfer of resources from the Centre to the States.
7. What is the reason for the centripetal bias in fiscal policy?
8. State the main purpose of inter-governmental fund distribution.
9. What method does the government adopt in the allocation of funds?

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and cottage industries, dairy farming, road transport, etc. Some sources of revenue should preferably be left in local hands; for example the income from water rates, house taxes, city transport and the like.

- To protect the economy from a balance of payments disequilibrium and the like, a policy of customs duties can be helpful at the national level. Regarding the industrial policy designed to help the overall growth of the economy, it is the national action that is needed; but to reduce the regional disparities, state actions can also be employed.
- Distributive justice is as much called for between regions of the same country, as between different members of the society. This justice implies that whatever be the level of governmental activity, the marginal disutility of taxation should be the same for different regions.
- It is very unlikely that the advanced states within a country will voluntarily agree to transfer adequate resources to the poorer states. For such a transfer, we should have a strong federal government with resources much larger than its own requirements (and a larger share of these resources should be coming from the more advanced regions of the country) so that it can transfer them to the poorer regions for their levelling up. Astrong centre is also needed for political integrity of the country, which again implies larger resource availability to the central government.
- India is a federal economy and in such an economy the policies of State revenue and expenditure are directly affected by policies relating to inter-governmental transfer. The optimum fiscal policy of a State is dependent upon the rules that transferring agencies apply to fund transferring to sub-national governments.
- Since the State has higher responsibility for expenditure, it is directed by the Constitution that the Central government needs to transfer resources to the State. The purpose of these transfers is to bridge the gap that exists between the resources that the States themselves can raise and the resources required by the State to fulfill the responsibilities that they have been assigned.
- India's Constitution states specifically the responsibilities and the roles the three tiers are to perform, and these are differentiated based on the issues of micro/ macro nature. Let us take an example.
- Based on current literature, it can be said that inter-governmental fund distribution has two main purposes: Bridging the fiscal gap and balancing the inter-State capacities.
- The responsibility for allocation of funds of the Finance Commission is just limited to non-plan current expenditures because of the Planning Commission performing similar functions.
- While the Finance Commission aims at fiscal equalization, the Planning Commission is more development oriented. The Planning Commission transfer funds so that the States' fiscal capacity can be increased.
- The practice for some certain allocation of funds to the States is based on schemes, and these schemes come with their own guidelines for the utilization of the allocated funds.
- In the allocation of funds to sectors such as employment and education, the government adopts a practice which is fundamentally based on need but not merit.

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- The highest criticism that is made of the Central-State fiscal linkage resides in the fact that a huge number of times, the relationship is dependent on what kind of political relationship is shared by a State with the government at the Centre.
- Policy makers and experts have again and again, raised questions regarding how relevant is the role of the Planning Commission.
- It can be seen that the Commission employs methods that are outdated for the purpose of calculation of allocations and policy creation and these are neither in line with the contemporary economic systems nor with the recipient and stakeholder needs.

5.5 KEY TERMS

5.5.1 **Federal structure:** A country is said to have a federal structure if its government is a multi-tiered (also termed multi-level or multi-layered) one, that is, its governmentexists at two or more layers.

5.5.2 **Distributive justice:** It implies that whatever be the level of governmental activity, the marginal disutility of taxation should be the same for different regions.

5.6 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Historical evolution of a federal set up normally follows one of the two alternative paths, namely, 'centralization' or 'unification' and 'decentralization'.
2. A federal set up is confronted with the twin issues of diversity and equivalence in the context of provision of public services and their financing.
3. Economists who ignore the problem of regional disparities advocate the principle of locational neutrality according to which no region should be allowed to compete capital away from others.
4. To protect the economy from a balance of payments disequilibrium and the like, a policy of customs duties can be helpful at the national level.
5. Distributive justice implies that whatever be the level of governmental activity, the marginal disutility of taxation should be the same for different regions.
6. The purpose of these transfers is to bridge the gap that exists between the resources that the States themselves can raise and the resources required by the State to fulfill the responsibilities that they have been assigned.
7. The centripetal bias in fiscal policy has been mainly due to the passing on of all of the residuary powers to the Centre.
8. Based on current literature, it can be said that inter-governmental fund distribution has two main purposes: Bridging the fiscal gap and balancing the inter-State capacities.
9. In the allocation of funds to sectors such as employment and education, the government adopts a practice which is fundamentally based on need but not merit.

5.7 QUESTIONS AND EXERCISES

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Short-Answer Questions

1. What is fiscal federalism? What does the field of federal finance comprise?
2. State the rationale for fiscal federation with special reference to a country having inter-regional disparities.
3. What are the issues that confront financial arrangements?
4. Describe efficiency as a principle of division of financial resources in a federation.
5. State the criteria of resource division.
6. Write a note on financial imbalance.
7. What is to be done when it is very unlikely that the advanced states within a country will voluntarily agree to transfer adequate resources to the poorer states?
8. What are the roles stated by the Indian Constitution for the three tiers of the government?
9. State the goals of inter-governmental fund allocation.
10. What are the steps involved in the transfer of funds by the Commission?
11. Why is there a debate regarding the existence of the Planning Commission?

Long-Answer Questions

1. What is the federal structure of a government? Highlight the evolutionary path, main features and reasons for inter-country variations of fiscal federation.
2. Evaluate the claim that fiscal federalism invariably faces a problem of financial indiscipline/imprudence on the part of governments. Do you think it is possible to effectively solve this problem?
3. Critically examine the assertion that issues of fiscal federalism faced by a country are closely related to the dynamism of its economic and political structure.
4. Explain the various financial issues of a federal set up.
5. Discuss the basic principles that should govern inter-government division of functions and resources covering, in particular, the problem of horizontal equity at sub-national layers of government. Also highlight the problems associated with assigning relative weights to different governmental services and duties like those relating to economic growth and social welfare.
6. What do you mean by financial imbalance? Discuss its types.
7. Discuss the role of the Finance Commission and Planning Commission in the transfer of resources from the Centre to the States in India.
8. Assess the fund allocation process of the Finance and Planning Commission.
9. Discuss the criticism of the federal finance structure of India.

5.8 FURTHER READING

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