

PUBLIC FINANCE

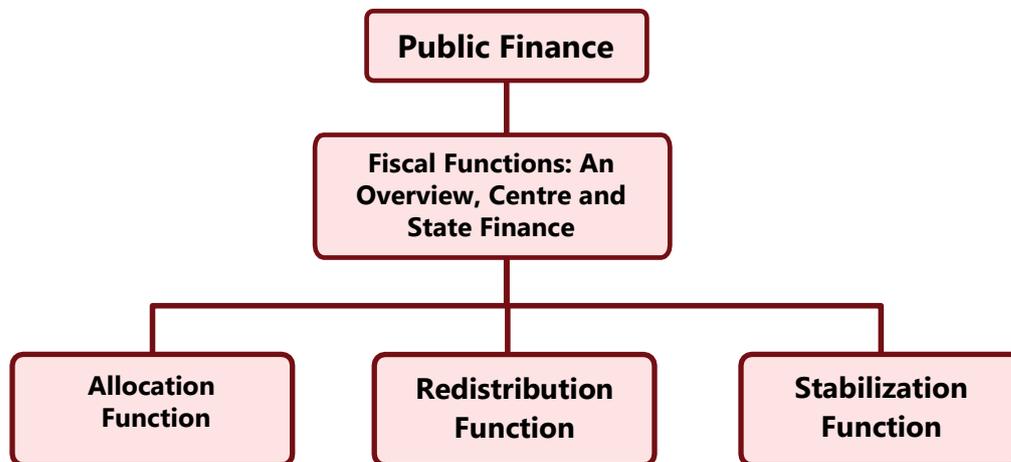


UNIT – 1: FISCAL FUNCTIONS: AN OVERVIEW, CENTRE AND STATE FINANCE

LEARNING OUTCOMES

After studying this Chapter, you will be able to –

- ◆ Explain the three-branch taxonomy of the role of government in a market economy
- ◆ Analyze the governmental economic actions and classify them according to the economic functions of the government
- ◆ Elucidate the nature of finances and responsibilities of the centre and state governments
- ◆ Describe the mode of division of resources between the union and the states

CHAPTER OVERVIEW **1.1 INTRODUCTION**

The governments of all nations have important economic functions even where markets constitute the basic resource allocation mechanism. The size and scope of government in market economies have grown much larger over the past few decades. The primary goal of the state is to promote the general welfare of the society. What governments do, or do not do, will obviously have an important impact on the economic performance of an economy and the quality of life of its citizens.

Governments at various levels involve in several operations for running the state. For example; the government raises money from various sources, incurs expenditures, consumes goods and services, borrows money, employs people, and provides key institutions such as property rights. The governments also establish and administer rules and regulations and puts in place policies concerning all aspects of life of people. We have experienced in our day-to-day life that though governments at various levels impose many rules and regulations in the economy, some matters still go unregulated. Similarly, most of the goods and services that we consume are provided to us by private producers, but there is broad agreement that certain goods and services should be provided exclusively by the government. For a variety of reasons, we believe that governments should accomplish some activities and should not do others.

As we know, Macroeconomics is the study of the economy as a whole. There are three main macroeconomic goals for any nation. The first is economic growth. If the real gross domestic product grows at a faster rate than population, then people can enjoy higher standard of living. The second goal is high levels of employment which will ensure higher income and higher output. When unemployment occurs, it harms not only the unemployed, but the society as a whole because there is loss of output that could have been produced. The third macroeconomic goal is stable price levels. Inflation reduces real incomes and purchasing power of some people, and disproportionately affects lower income families. On the contrary, deflation signals a downturn in economic activity which may cause recession or even depression and large scale unemployment. By ensuring stable prices, an economy can avoid prolonged inflation and deflation and achieve high levels of economic activity and employment.

The government does not expect the economy to function automatically; rather it intervenes to direct them to function in particular directions. Such intervention on the part of the government is based on the belief that the objective of the economic system and the role of government is to improve the wellbeing of individuals and households. The purpose of this lesson is to examine the economic functions of the government and to understand why the government should invariably perform them.



1.2 THE ROLE OF GOVERNMENT IN AN ECONOMIC SYSTEM

We shall first consider why an 'economic system' should be in place. The basic economic problem of scarcity arises from the fact that wants are unlimited and the resources available to any society are limited. Consequently an economy cannot produce all economic goods and services that its members desire to have. Therefore, an economic system by which a society (households, businesses, and government) makes decisions about allocating resources to produce products and about distributing those products should exist to answer the basic questions such as what, how and for whom to produce and how much resources should be set apart to ensure growth of productive capacity.

The modern society, in general, offers three alternate economic systems through which the decisions of resource reallocation may be made namely, the market, the government and a mixed system where both markets and governments simultaneously determine resource allocation. Correspondingly, we have three economic systems namely, capitalism, socialism and mixed economy, each with different degrees of state intervention in economic activities.

Adam Smith is often described as a bold advocate of free markets and minimal governmental activity. Smith believed that government's roles in society should be limited, but well defined

However, Smith saw an important resource allocation role for the government when he underlined the role of government in:

- (a) national defence to protect the nation from external violence and invasion,
- (b) establishing a system of justice to provide internal law and order and to protect property
- (c) establishment and maintenance of highly beneficial public institutions and public works such as roads, bridges, canals, harbours, and postal system that profit-seeking individuals may not be able to efficiently build and operate.

Since the 1930s, more specifically, as a consequence of the great depression, the state's role in the economy has been distinctly gaining in importance, and therefore, the traditional functions of the state have been supplemented with what is referred to as economic functions (also called fiscal functions or public finance function). While there are differences among different countries in respect of the nature and extent of government intervention in economies, all of them agree on one point that the governments are expected to play a major role in the economy. This comes out of the belief that government intervention will always influence the performance of the economy in a positive way.

Richard Musgrave, in his classic treatise 'The Theory of Public Finance' (1959), introduced the three-branch taxonomy of the role of government in a market economy. Musgrave believed that, for conceptual purposes, the functions of the government are to be separated into three, namely,

- (a) resource allocation (to ensure efficiency),
- (b) income redistribution (to guarantee fairness), and
- (c) macroeconomic stabilization (to ensure price stability).

The allocation and distribution functions are primarily microeconomic functions, while stabilization is a macroeconomic function. The allocation function aims to correct the sources of inefficiency in the economic system, while the distribution role ensures that the distribution of wealth and income is fair. Monetary and fiscal policies, the problems of macroeconomic stability, economic growth and maintenance of high levels of employment and price stability etc. fall under the stabilization function.

The national budget, in general, reflects the economic policy of a government and the government exercises its economic functions partly through the budget. We shall now discuss in detail the conceptual three-function framework of the responsibilities of the government.

1.3 THE ALLOCATION FUNCTION

Resource allocation refers to the way in which the available resources or factors of production are allocated among the various uses to which they might be put. It determines how much of the various kinds of goods and services will actually be produced in an economy. Resource allocation is a critical problem because the resources of a society are limited in supply, whereas the wants of the members of the society are unlimited. In addition, any given resource can have many alternative uses.

One of the most important functions of an economic system is the optimal or efficient allocation of scarce resources so that the available resources are put to their best use and no wastages are there. Economic efficiency indicates a situation in which all resources are allocated to serve each person in the best way possible, minimising waste and inefficiency.

The private sector resource allocation is characterized by market supply and demand and price mechanism as determined by consumer sovereignty and producer profit motives. The state's allocation, on the other hand, is accomplished through the revenue and expenditure activities of governmental budgeting. In the real world, resource allocation is determined by both market and the government.

A market economy is subject to serious malfunctioning in several basic respects. While private goods will be sufficiently provided by the market, public goods and merit goods will not be produced in sufficient quantities by the market. Missing markets or nonexistence of markets occur in a variety of situations. Why do markets fail to give the right answers to the questions as to how the resources can be efficiently utilised and what goods should be produced and in what quantities? In other words, why do markets generate misallocation of resources?

Allocative efficiency is concerned with utilizing limited resources to produce goods and services that would maximize value to the society. Allocative efficiency achieves the largest possible output of goods and services from the existing stock of resources and technology.

Efficient allocation of available resources in an economy is assumed to take place only when the markets are perfectly competitive and economic agents make rational choices and decisions. In reality, markets are never perfectly competitive. Market failures which hinder efficient allocation of resources occur mainly due to the following reasons:

- Imperfect competition and presence of monopoly power in different degrees leading to under-production and higher prices than would exist under conditions of competition. Markets may fail to control the abuses of monopoly power.
- Markets typically fail to provide collective public goods such as defence which are, by their very nature, consumed in common by all people.
- Incomplete markets; markets may fail to produce the right quantity merit goods, such

as education and healthcare

- Common property resources (e.g. environment) are overused and exhausted in individual pursuit of self-interest.
- Externalities which arise when the production and consumption of a good or service affect third parties (e.g. pollution).
- Factor immobility which causes unemployment and inefficiency.
- Imperfect information because it may not be in the interests of one party to provide full information to the other party, and
- Inequalities in the distribution of income and wealth

According to Musgrave, the state is the instrument by which the needs and concerns of the citizens are fulfilled. Therefore, public finance is connected with economic mechanisms that should ideally lead to the effective and optimal allocation of limited resources. This logic, in effect, makes it necessary for the government to intervene in the market to bring about improvement in social welfare.

In the absence of appropriate government intervention, market failures may occur and the resources are likely to be misallocated with too much production of certain goods or too little production of certain other goods. For example, the society may produce too much of demerit goods and too little of merit goods. The allocation responsibility of the governments involves suitable corrective action when private markets fail to provide the right and desirable combination of goods and services. Briefly put, market failures provide the rationale for government's allocative function.

Let us see a few of many examples of government intervention in resource allocation. You might have noticed that in many cases, the government can provide us with goods and services that we cannot produce on our own or buy at a price from the market. For example, the government establishes property rights and makes the necessary arrangements for enforcing contracts through provision of law enforcement and courts. When externalities are involved in the production and consumption of goods and services, prices do not reflect the true costs and benefits and government intervenes with appropriate corrective measures. Merit goods which are greatly beneficial to the society are by and large provided by the government. Production and consumption of demerit goods are controlled with appropriate policies. These interventions do not imply that markets are replaced by government action. In its allocation role, the government acts as a complement rather than as a substitute to the market system in an economy.

The resource allocation role of government's policy focuses on the potential for the government to improve economic performance through its expenditure and tax policies. The allocative function in budgeting determines:

- (a) who and what will be taxed
- (b) how much and on what the government revenue will be spent
- (c) the process by which the total resources of the economy are divided among various uses
- (d) the optimum mix of various social goods (both public goods and merit goods).
- (e) the level of involvement of the public sector in the national economy
- (f) the reallocation of society's resources from private use to public use.

A variety of allocation instruments are available by which governments can influence resource allocation in the economy. For example:

- the government may directly produce an economic good (for example, electricity and public transportation services)
- the government may use the price mechanism (i.e altering the market prices determined by demand and supply through taxes and subsidies) to influence private allocation by policies that change the behaviour of consumers and producers. In other words, the government may direct resource allocation through incentives and disincentives (for example, tax concessions and subsidies may be given for the production of goods that promote social welfare and higher taxes may be imposed on goods such as cigarettes and alcohol so that their prices are higher)
- the government may influence allocation through legislation and force. For example, ban of single use plastic goods prevent resources moving into their production.
- The competition policies, merger policies etc. affect the structure of industry and commerce (for example, the Competition Act in India promotes competition and prevents anti-competitive activities)
- governments' regulatory activities such as licensing, controls, minimum wages, and directives on location of industry influence resource allocation.
- government sets legal and administrative frameworks, and
- governments may adopt any combination of possible remedies

1.4 THE REDISTRIBUTION FUNCTION

You might have noticed that over the past decades there has been tremendous expansion in economic activities resulting in enormous increase in aggregate output and wealth. However, the outcomes of such economic growth have not spread evenly across the households. Socialist ideology which emphasized equality created strong pressure on the redistributive role of governments. The distribution responsibility of the government arises from the fact that, left to the market, the distribution of income and wealth among individuals in the society is likely to be skewed and therefore, the government has to intervene to ensure a more socially optimal and egalitarian distribution.

The distributive function of budget is related to the basic question of 'for whom' should an economy produce goods and services. Governments can redistribute income and wealth either through the expenditure side or through the revenue side of the budget. On the expenditure side, governments may provide free or subsidised education, healthcare, housing, food and basic goods etc. to deserving people. On the revenue side, redistribution is done through progressive taxation.

Effective demand is determined by the level of income of the households and this, in turn determines the distribution of real output among people. Therefore, the distribution function also relates to the manner in which the effective demand over the economic goods is divided among the various individual and family spending units of the society.

The distribution function of the government aims at:

- redistribution of income to achieve an equitable distribution of societal output among
- households ensuring increased overall social welfare
- advancing the well-being of those members of the society who suffer from deprivations of different types
- providing equality of income, wealth and opportunities
- providing security (in terms of fulfillment of basic needs) for people who have hardships, and ensuring that everyone enjoys a minimum standard of living

A few examples of the redistribution function (or market intervention for socio-economic reasons) performed by governments are:

- taxation policies of the government whereby progressive taxation of the rich is combined with provision of subsidy to the poor households
- proceeds from progressive taxes used for financing public services, especially those that benefit low-income households (for example, supply of essential food grains at highly subsidized prices to BPL households)

- employment reservations and preferences to protect certain segments of the population, minimum wages and minimum support prices for farmers for their output
- unemployment benefits and transfer payments to provide support to the underprivileged, dependent, physically handicapped, the older citizens and the unemployed.
- families below the poverty line are provided with monetary aid and aid in kind
- regulation of manufacture and sale of certain products to ensure the health and well-being of consumers, and
- special schemes for backward regions and for the vulnerable sections of the population.

In modern times, most of the egalitarian welfare states provide free or subsidized education and health-care system, unemployment benefits, pensions and such other social security measures. There is, nevertheless, an argument that in exercising the redistributive function, there would be a conflict between efficiency and equity. In other words, governments' redistribution policies which interfere with producer choices or consumer choices are likely to have efficiency costs or deadweight losses. For example, greater equity can be achieved through high rates of taxes on the rich; but high rates of taxes could also act as a disincentive to entrepreneurship and work, and discourage people from making savings and investments and taking risks. This in turn will have negative consequences for economic output, productivity and growth of the economy. Consequently, the potential tax revenue may be reduced in future and the scope for government's welfare activities would get seriously limited. As such, an optimal budgetary policy towards any distributional change should reconcile the conflicting goals of efficiency and equity by exercising an appropriate trade-off between them. In other words, redistribution measures should be accomplished with minimal efficiency costs by carefully balancing equity and efficiency objectives.

1.5 STABILIZATION FUNCTION

Macroeconomic stability is said to exist when:

- an economy's output matches its production capacity,
- the economy's total spending matches its total output
- the economy's labour resources are fully employed, and
- Inflation is low and stable.

The theoretical rationale for the stabilization function of the government is derived from the Keynesian proposition that a market economy does not automatically generate full

employment and price stability and therefore, the governments should pursue deliberate stabilization policies.

The market system has inherent tendencies to create business cycles. The market mechanism is limited in its capacity to prevent or to resolve the disruptions caused by the fluctuations in economic activity. The government and the country's central bank promote full employment and price stability through prudent fiscal policy and monetary policy. In the absence of appropriate corrective intervention by government, the instabilities that occur in the economy in the form of recessions, inflation etc. may be prolonged for longer periods causing enormous hardships to people, especially the poorer sections of the society. It is also possible that a situation of stagflation (a state of affairs in which inflation and unemployment exist side by side) may set in and make the problem more complex. The stabilization issue also becomes more complex due to 'contagion effect' whereby the increased international interdependence and financial integration causes forces of instability to get easily transmitted from one country to other countries.

The stabilization function is concerned with the performance of the aggregate economy in terms of:

- labour employment and capital utilization,
- overall output and income,
- general price levels,
- balance of international payments, and
- the rate of economic growth.

The stabilization function is one of the key functions of fiscal policy and aims at eliminating macroeconomic fluctuations arising from suboptimal allocation of resources. As you might recall, the economic crisis that engulfed the world in 2008 and the more recent global phenomenon of COVID pandemic-induced economic crisis have highlighted the importance of macroeconomic stability and have, therefore, revived immense interest in countercyclical fiscal policy.

Government's stabilization intervention may be through monetary policy as well as fiscal policy. Monetary policy works through controlling the size of money supply and interest rate in the economy which in turn would affect consumption, investment and prices.

Fiscal policy for stabilization purposes attempts to direct the actions of individuals and organizations by means of its expenditure and taxation decisions. We know that government expenditure injects more money into the economy and stimulates demand. On the other hand, taxes reduce the disposable income of people and therefore, reduce effective demand.

During recession, in order to ensure income protection, the government increases its expenditure or cuts down taxes or adopts a combination of both so that aggregate demand is kept stable or even boosted up with more money put into the hands of the people. On the other hand, to control high inflation the government cuts down its expenditure or raises taxes. In other words, an expansionary fiscal policy is adopted to alleviate recession and a contractionary fiscal policy is resorted to for controlling high inflation.

The nature of the budget (surplus or deficit) also has important implications on a country's economic activity. While deficit budgets are expected to stimulate economic activity, surplus budgets tend to slow down economic activity.

To sum up;

- If there is high inflation the government may decrease government spending, raise taxes, and/or reduce the money supply
- If there is high unemployment the government might increase government spending, reduce taxes, and/or increase the money supply

There is often a conflict between the different goals and functions of budgetary policy. Effective policy design to meet the diverse goals of government is very difficult to conceive and to implement. The challenge before any government is how to design its budgetary policy so that the pursuit of one goal does not jeopardize the other.

Centre and State Finance

Fiscal federalism, a term introduced by Richard Musgrave, deals with the division of governmental functions and financial relations among the different levels of government. Musgrave argued that the federal or central government should be responsible for performing functions related to economic stabilization and income redistribution, and the allocation of resources should be the responsibility of the state and local governments.

India is a federation of 28 states and 8 union territories. Fundamentally, federalism is an institutional arrangement to accommodate two sets of government — one at the national level and the other at the regional level. Each government is autonomous in its own sphere. An independent judiciary is established to resolve disputes between the central government and the states on issues related to division of power.

The constitution of India has provided for the division of powers between the central and the state governments. Article 246 of the Constitution demarcates the powers of the union and the state by classifying their powers into three lists, namely union list, state list and the concurrent list. The union list contains items on which the union parliament alone can legislate, the state list has items on which the state legislative assemblies alone can legislate, and the concurrent list, on which both the parliament and the legislative assemblies can

legislate. In the event of conflicting legislation in concurrent list, the law passed by the centre prevails.

Allocation of revenue and expenditure responsibilities to different levels of governments is a fundamental matter in a federation. Sources of revenue for both the centre and states are clearly demarcated with regard to the financial relationship and the responsibilities between them.

Taxes are levied by the centre and the states. The central government has greater revenue raising powers. The union government can levy taxes such as tax on income, other than agricultural income, customs and export duties, excise duties on certain goods, corporation tax, tax on capital value of assets excluding agricultural land, terminal taxes, security transaction tax, central GST, union excise duty, taxes other than stamp duties etc.

The state governments can levy taxes on agricultural income, lands and buildings, mineral rights, electricity, vehicles, tolls, professions, collect land revenue and impose excise duties on certain items. The property of the union is exempt from state taxation. The property and income of the states are not liable to be taxed by the centre.

A significant element of fiscal federalism is inter-governmental transfers and revenue-sharing to fulfill diverse national objectives. Since the states have comparatively less sources of income, their revenues may not be sufficient to meet their expenditure responsibilities. There is substantial dependence of states on the union for securing necessary revenues. Articles 268 to 281 of the constitution contain specific provisions in respect of distribution of finances among states.

Distribution of revenue between the union and states is based on the constitutional provisions as follows:

Article 268	Duties levied by the union but collected and appropriated by the states.
Article 269	Taxes levied and collected by the union but assigned to the states.
Article 270	Taxes levied and collected by the union and distributed between the union and states as prescribed in clause 2 and the States.
Article 271	Surcharge on certain duties and taxes for purposes of the union
Article 275	Statutory Grants – in-aid from the union to certain states.
Article 282	Grants for any public purpose
Article 293	Loans for any public purpose

Besides the above provisions enabling transfer of resources from the centre to the states, a unique feature of the Indian Constitution is that Article 280 provides for an institutional mechanism, namely the Finance Commission, to facilitate such transfers. The Finance

Commission is a constitutionally mandated body that is at the centre of fiscal federalism. It is responsible for evaluating the state of finances of the union and state governments, recommending the sharing of taxes between them and laying down the principles determining the distribution of these taxes among states.

The Finance Commission helps in maintaining fiscal federalism in India by performing following functions:

- (a) The distribution between the union and the states of the net proceeds of taxes which are to be divided between them and the allocation between the states of the respective shares of such proceeds.
- (b) Determination of principles and quantum of grants-in-aid to states which are in need of such assistance.
- (c) To make recommendations to the President on measures needed to augment the consolidated fund of a state to supplement the resources of the panchayats and municipalities in the state on the basis of the recommendations made by the Finance Commission of the state.
- (d) Any other matter referred to the Commission by the President in the interests of sound finance.

While recommending transfers, the Finance Commission considers issues related to vertical equity (deciding about the share of all states in the revenue collected by centre) and horizontal equity (allocation among states their share of central revenue). The Finance Commission broadly assesses the overall gross tax revenues of the union; cesses, surcharges and non-tax revenue are netted out from gross tax revenue to arrive at the net divisible pool (NDP). Following a constitutional amendment in year 2000, the divisible pool now consists of all taxes of the union. Considering the needs of the central and the state governments, the Commission determines what percentage out of the net divisible pool should be assigned to the state governments. The balance remains with the central government.

The Fifteenth Finance Commission was constituted on 27, November 2017 against the background of the abolition of Planning Commission (as also of the distinction between Plan and non-Plan expenditure) and the introduction of the goods and services tax (GST). The commission recommended the share of states in the central taxes (vertical devolution) for the 2021-26 to be 41%, which is the same as that for 2020-21. This is less than the 42% share recommended by the 14th Finance Commission for 2015-20. The adjustment of 1% is to provide for the newly formed union territories of Jammu and Kashmir, and Ladakh from the resources of the centre. The criteria for distribution of central taxes among states for 2021-26 period are same as that for 2020-21. They is:

- (a) Income Distance i.e the distance of a state's income from the state with the highest income.
- (b) Area
- (c) Population (2011)
- (d) Demographic performance (to reward efforts made by states in controlling their population)
- (e) Forest and ecology:
- (f) Tax and fiscal efforts:

The introduction of GST, which was rolled out across the country on 1 July 2017, has significantly changed the state of affairs of financial relations between the centre and states. The GST subsumes the majority of indirect taxes – excise, services tax, sales tax, octroi (entry tax). The GST has made India's indirect tax regime unitary in nature.

The states levy and collect state GST (SGST) and the union levies and collects the central GST (CGST). For any particular good or service or a combination of the two, the SGST and CGST rates are equal. An integrated GST (IGST) is applied on inter-state movement of goods and services and on imports and exports. IGST is simply a combination of SGST and CGST administered and collected by the union government, kept in a separate account, and distributed between the union and states after settlement of input tax credit and verification of the destination of the goods and services. With many taxes subsumed under it, GST accounts for 35 per cent of the gross tax revenue of the union and around 44 per cent of own tax revenue of the states.

As per the supreme court verdict in May 2022, the Union and state legislatures have "equal, simultaneous and unique powers" to make laws on Goods and Services Tax (GST) and the recommendations of the GST Council are not binding on them.

The GST system replaced the then prevailing production-based taxation system with a consumption based one. Since the manufacturing states had apprehension about loss of revenue, it was decided to provide compensation to states for loss of revenue arising on account of implementation of the Goods and Services Tax for a period of five years from the date of its implementation. For providing compensation to states, a cess is levied on some luxury goods and demerit goods and the proceeds are credited to the compensation fund. GST compensation was extended beyond five years to enable states to tide over the pandemic induced economic slowdown.

During the five-year transition period, the top five GST compensation-receiving states were Maharashtra, Karnataka, Gujarat, Tamil Nadu, and Punjab. The total amount of compensation released to the states and union territories during the year 2022-23 is ₹ 1,15,662 crore.

In so far as expenditure decentralization is concerned, the central government is entrusted with the responsibilities of provision of nationally important areas like defence, foreign affairs, foreign trade and exchange management, money and banking, cross-state transport and communication. The state governments are entrusted with the responsibility of facilitating agriculture and industry, providing social sector services such as health and education, police protection, state roads and infrastructure. The local self governments such as municipalities and panchayats are entrusted with the responsibility of providing public utility services such as water supply and sanitation, local roads, electricity etc. For items that fall in the concurrent list, both central and state governments are responsible for providing services.

Borrowing by the government of India and borrowing by states are defined under Article 292 and 293 of Constitution of India. The centre may borrow within the limits fixed by parliament by law upon the security of the Consolidated Fund of India or give guarantees within such limits, if any. The state governments may borrow within the territory of India upon the security of the Consolidated Fund of the State within such limits, if any, as may from time to time be fixed by the Legislature of such state by law, or give guarantees within such limits. The centre may give loans to the states within limits fixed under article 292 and give guarantees in respect of loans raised by the states. States need to obtain the centre's consent in order to borrow in case the state is indebted to the centre over a previous loan.

SUMMARY

- ◆ Government intervention to direct the functioning of the economy is based on the belief that the objective of the economic system and the role of government is to improve the wellbeing of individuals and households.
- ◆ An economic system should exist to answer the basic questions such as what, how and for whom to produce and how much resources should be set apart to ensure growth of productive capacity.
- ◆ Richard Musgrave (1959) introduced the three-branch taxonomy of the role of government in a market economy namely, resource allocation, income redistribution and macroeconomic stabilization.
- ◆ The allocation and distribution functions are primarily microeconomic functions, while stabilization is a macroeconomic function.
- ◆ One of the most important functions of an economic system is the optimal or efficient allocation of scarce resources so that the available resources are put to their best use and no wastages are there.

- ◆ Market failures, which hold back the efficient allocation of resources, occur mainly due to imperfect competition, presence of monopoly power, collectively consumed public goods, externalities, factor immobility, imperfect information, and inequalities in the distribution of income and wealth.
- ◆ The allocation responsibility of the governments involves appropriate corrective action when private markets fail to provide the right and desirable combination of goods and services.
- ◆ A variety of allocation instruments are available by which governments can influence resource allocation in the economy such as, direct production, provision of incentives and disincentives, regulatory and discretionary policies etc.,
- ◆ The distributive function of budget is related to the basic question of for who should an economy produce goods and services and aims at redistribution of income so as to ensure equity and fairness to promote the wellbeing of all sections of people and is achieved through taxation, public expenditure, regulation and preferential treatment of target populations.
- ◆ Redistribution policies are likely to have efficiency costs or deadweight losses and therefore redistribution measures should be accomplished with minimal efficiency cost by carefully balancing equity and efficiency objectives.
- ◆ A market economy does not automatically generate full employment and price stability and therefore the governments should pursue deliberate stabilization policies.
- ◆ Stabilization function is one of the key functions of fiscal policy and aims at eliminating macroeconomic fluctuations arising from suboptimal allocation.
- ◆ The stabilization function is concerned with the performance of the aggregate economy in terms of labour employment and capital utilization, overall output and income, general price levels, economic growth and balance of international payments.
- ◆ Government's stabilization intervention may be through monetary policy as well as fiscal policy. Monetary policy works through controlling the size of money supply and interest rate in the economy, while fiscal policy aims at changing aggregate demand by suitable changes in government spending and taxes.

Centre and state Finance

- ◆ Fiscal federalism deals with the division of governmental functions and financial relations among the different levels of government.
- ◆ The central government should be responsible for the economic stabilization and income redistribution, but the allocation of resources should be the responsibility of state and local governments.

- ◆ Article 246 of the Constitution demarcates the powers of the union and the state by classifying their powers into 3 lists, namely union list (on which the union parliament alone can legislate) state list (on which the state legislative assemblies alone can legislate) and the concurrent list on which both, the parliament and the legislative assemblies can legislate.
- ◆ The union government can levy taxes such as tax on income, other than agricultural income, customs and export duties, excise duties on certain goods, corporation tax, tax on capital value of assets, excluding agricultural land, terminal taxes, security transaction tax, Central GST, Union Excise Duty, taxes other than stamp duties etc.
- ◆ The state governments can levy taxes on agricultural income, lands and buildings, mineral rights, electricity, vehicles, tolls, professions, as well as collect land revenue, and impose excise duties on certain items.
- ◆ Articles 268 to 281 of the constitution contain specific provisions in respect of distribution of finances among states.
- ◆ Article 280, provides for an institutional mechanism, namely the Finance Commission, to facilitate such transfers. It is responsible for evaluating the state of finances of the union and state governments, recommending the sharing of taxes between them and laying down the principles determining the distribution of these taxes among States
- ◆ The Finance Commission considers issues related to vertical equity (deciding about the share of all states in the revenue collected by centre) and horizontal equity (allocation among states their share of central revenue).
- ◆ The Fifteenth Finance Commission recommended the share of states in the central taxes (vertical devolution) for the 2021-26 to be 41%.
- ◆ The criteria for distribution of central taxes among states for 2021-26 are income distance i.e the distance of a state's income from the state with the highest income, area, population (2011), demographic performance (to reward efforts made by states in controlling their population), forest and ecology and tax and fiscal efforts.
- ◆ States levy and collect state GST (SGST) and the union levies and collects the central GST (CGST). An integrated GST (IGST) is applied on inter-state movement of goods and services and on imports and exports.
- ◆ For providing compensation to states, a cess is levied on luxury goods and demerit goods and the proceeds are credited to the compensation fund. GST compensation was extended beyond five years to enable states to tide over the pandemic induced economic slowdown.

- ◆ The central government is entrusted with the responsibilities of provision of nationally important areas like defence, foreign affairs, foreign trade and exchange management, money and banking, cross-state transport and communication.
- ◆ The state governments are entrusted with the responsibility of facilitating agriculture and industry, providing social sector services such as health and education, police protection, state roads and infrastructure.
- ◆ The local self governments such as municipalities and panchayats are entrusted with the responsibility of providing public utility services such as water supply and sanitation, local roads, electricity etc. For items that fall in the concurrent list, both central and state governments are responsible for providing services.

TEST YOUR KNOWLEDGE

Multiple Choice Type Questions

1. *Redistribution policies are likely to have efficiency costs because*
 - (a) *They will reduce the efficiency of governments*
 - (b) *They may create disincentives to work and save*
 - (c) *Governments have to forego taxes*
 - (d) *They are likely to make the poor people dependent on the rich*
2. *Macroeconomic stabilization may be achieved through*
 - (a) *Free market economy*
 - (b) *Fiscal policy*
 - (c) *Monetary policy*
 - (d) *(b) and (c) above*
3. *Which of the following policies of the government fulfils the redistribution function*
 - (a) *Parking the army on the northern borders of the country*
 - (b) *Supply of food grains at subsidized prices to the poor people*
 - (c) *Controlling the supply of money through monetary policy*
 - (d) *All of the above*
4. *Choose the correct statement*
 - (a) *Fiscal policy involves the use of changes in taxation and government spending;*

while monetary policy involves the use of price and profit controls.

- (b) Fiscal policy involves the use of price and profit controls; while monetary policy involves the use of taxation and government spending.*
 - (c) Fiscal policy involves the use of changes in taxation and government spending; while monetary policy involves the use of changes in the supply of money and interest rates.*
 - (d) Fiscal policy involves the use of changes in the supply of money and interest rates; while monetary policy involves the use of changes in taxation and government spending.*
5. *The justification for government intervention is best described by*
- (a) The need to prevent recession and inflation in the economy*
 - (b) The need to modify the outcomes of private market actions*
 - (c) The need to bring in justice in distribution of income and wealth*
 - (d) All the above*
6. *Read the following statements:*
- 1. The market-generated allocation of resources is usually imperfect and leads to inefficient allocation of resources in the economy*
 - 2. Market failures can at all times be corrected through government intervention*
 - 3. Public goods will not be produced in sufficient quantities in a market economy*
- Of the three statements above:*
- (a) 1,2 and 3 are correct*
 - (b) 1 and 3 are correct*
 - (c) 2 and 3 are correct*
 - (d) 3 alone is correct*
7. *When a government offers unemployment benefits and also resorts to progressive taxation which function does it seem to fulfill?*
- (a) It is trying to establish stability in an economy*
 - (b) It is trying to redistribute income and wealth*
 - (c) It is trying to allocate resources to their most efficient use*
 - (d) It is creating a source of market failure*

8. Government of Emeline Land decides to provide most modern road infrastructure throughout the nation. This can be classified as
- (a) Distribution function
 - (b) Allocation function
 - (c) Stabilization function
 - (d) None of the above
9. Which function does the government perform when it provides transfer payments to offer support to the underprivileged
- (a) Allocation
 - (b) Efficiency
 - (c) Distribution
 - (d) None of the above
10. Which of the following is true in respect of centre and state government finances?
- (a) The centre can tax agricultural income and mineral rights
 - (b) Finance commission recommends distribution of taxes between the centre and states
 - (c) GST subsumes majority of direct taxes and a few indirect taxes
 - (d) IGST is collected by the state governments
11. GST compensation is given to
- (a) to the industries which have made losses due to the introduction of GST
 - (b) to compensate for the lower rates of GST on essential items
 - (c) to the states to compensate for the loss of revenue due to the introduction of GST
 - (d) to compensate for the loss of input tax credit in manufacturing
12. Which of the following is true in respect of the role of Finance Commissions in India?
- I. The distribution between the union and the states of the net proceeds of taxes
 - II. Allocation between the states of the respective shares of such proceeds.
 - III. Make Recommendations on integrated GST on inter-state movement of goods and services
 - IV. To recommend expenditure decentralization among different states

- (a) *I and II are correct*
 - (b) *II and III are correct*
 - (c) *I, II and III are correct*
 - (d) *All the above are correct*
13. *In a federal set up, the stabilization function can be effectively performed by*
- (a) *Respective state governments*
 - (b) *Ministry of taxes*
 - (c) *The government at the centre*
 - (d) *None of the above*
14. *Which of the following is concerned with division of economic responsibilities between the central and state Government of India?*
- (a) *NITI Aayog*
 - (b) *central bank*
 - (c) *Finance Commission*
 - (d) *Parliament*
15. *Fiscal Federalism refers to _____.*
- (a) *Organizing and implementing development plans*
 - (b) *Sharing of political power between centers and states*
 - (c) *The management of fiscal policy by a nation*
 - (d) *Division of economic functions and resources among different layers of the government*
16. *Which one of the following taxes is levied by the state government only?*
- (a) *Corporation tax*
 - (b) *Wealth tax*
 - (c) *Income tax*
 - (d) *None of the above*
17. *The percentage of share of states in central taxes for the period 2021-26 recommended by the Fifteenth Finance Commission is*
- (a) *38 percent*

- (b) 41 percent
- (c) 42 percent
- (d) The commission has not submitted its report
18. Which of the following is not a criterion for determining distribution of central taxes among states for 2021-26 period
- (a) Demographic performance
- (b) Forest and ecology
- (c) Infrastructure performance
- (d) Tax and fiscal efforts
19. As per the supreme court verdict in May 2022
- (a) The union has greater powers than the states for enacting GST laws
- (b) The union and state legislatures have "equal, simultaneous powers" to make laws on Goods and Services Tax
- (c) The union legislature's enactments will prevail in case of a conflict between those of union and states
- (d) The state legislatures can make rules only with the permission of central government
20. Providing social sector services such as health and education is
- (a) the responsibility of the central government
- (b) the responsibility of the respective state governments
- (c) the responsibility of local administrative bodies
- (d) none of the above

ANSWERS

1.	(b)	2.	(d)	3.	(b)	4.	(c)	5.	(d)	6.	(b)
7.	(b)	8.	(b)	9.	(c)	10.	(b)	11.	(c)	12.	(a)
13.	(c)	14.	(c)	15.	(d)	16.	(d)	17.	(b)	18.	(c)
19.	(b)	20.	(b)								

UNIT – 2: MARKET FAILURE/ GOVERNMENT INTERVENTION TO CORRECT MARKET FAILURE

LEARNING OUTCOMES

After studying this unit, you will be able to –

- Define the concept of market failure
- Describe the different sources of market failure
- Explain various government interventions for correcting market failure

CHAPTER OVERVIEW

2.1 INTRODUCTION

The market is an environment where buyers and sellers transact or exchange goods and services. Economists presume that people will make choices in their own self-interest. They will choose those things that provide the greatest personal benefit, and keep themselves away from those that are not valuable and worth seeking. In other words, individuals will behave rationally.

The general belief is that since rational individuals act to maximise self interest, a perfectly working market system is, by default, efficient and will effectively allocate scarce economic resources in the best possible manner. In other words, in a well functioning market, prices provide the accurate signals to producers and consumers and the right quantity of whatever consumers choose to consume will be produced and supplied at the right price. However, this is not always true. Under certain circumstances, 'market failure' occurs, i.e. the market fails to allocate resources efficiently and therefore, market outcomes become inefficient.

2.2 THE CONCEPT OF MARKET FAILURE

The inefficient allocation of resources in an economy is described as market failure. The term "market failure" does not mean the market is not working at all, it only means that the market does not function in the way that it should. Market failure is a situation in which the free market leads to misallocation of society's scarce resources in the sense that there is either overproduction or underproduction of particular goods and services leading to a less than optimal outcome. There are two types of market failure namely;

1. Complete market failure. This is a case of "missing markets" and occurs when the market does not supply products at all despite the fact that such products and services are wanted by people. E.g. Pure public goods.
2. Partial market failure occurs when the market does actually function, but it produces either the wrong quantity of a product or at the wrong price. This results in loss of economic welfare.

2.3 WHY DO MARKETS FAIL?

The pertinent question here is why do markets fail? Or why do markets fail to produce the ideal outcome that economic theory predicts? Perfectly competitive markets will generate outcomes in which the economy's resources are allocated to their 'highest valued uses' and no one person can be made better off without making at least another person worse off.

Though perfectly competitive markets work efficiently, in the real world, conditions necessary for efficient outcome namely, perfect competition is not practical. We know that conditions such as large number of small firms, perfect knowledge, homogenous products etc. are not generally present in most markets. We shall first try to understand why markets fail and then proceed to identify the role of government in dealing with market failure.

There are four major reasons for market failure. They are:

- Market power,
- Externalities,
- Public goods, and
- Incomplete information

We shall discuss each of the above in detail.

2.3.1 Market Power

Market power or monopoly power is the ability of a firm to profitably raise the market price of a good or service over its marginal cost. Firms that have market power are price makers and therefore, can charge a price that gives them positive economic profits. Excessive market power causes the single producer or a small number of producers to restrict output (i.e. produce and sell less output than would be produced in a competitive market) and charge price higher than what would prevail under perfect competition. These profits are not achieved due to operating efficiency, but due to market power and dominance. Thus, market fails to produce the right quantity of goods and services at the right price.

2.3.2 Externalities

We begin by describing externalities and then proceed to discuss how they create market inefficiencies. As we are aware, anything that one individual does, may have, at the margin, some effect on others. For example, if individuals decide to switch from consumption of ordinary vegetables to consumption of organic vegetables, they would, other things equal, increase the price of organic vegetables and potentially reduce the welfare of existing consumers of organic vegetables. However, we should note that all these operate through price mechanism i.e. through changes in prices. The price system works efficiently because market prices convey information to both producers and consumers. However, when a consumption or production activity has an indirect effect (either positive or negative) on consumption or production activities of others and such effects are not reflected directly in market prices, we call it an externality.

Externalities are costs (negative externalities) or benefits (positive externalities), which are not reflected in free market prices. They are called externalities because they are "external" to the market. Externalities are also referred to as 'spillover effects', 'neighbourhood effects' 'third-party effects' or 'side-effects', as the originator of the externality imposes costs or benefits on others who are not responsible for initiating the effect. Since it occurs outside the price mechanism, it has not been compensated for, or in other words it is uninternalized or the cost (benefit) of it is not borne (paid) by the parties.

Externalities can be positive or negative. Negative externalities occur when the action of one party imposes costs on another party. Positive externalities occur when the action of one party confers benefits on another party.

Production Externalities

A negative production externality initiated in production which imposes an external cost on others may be received by another in consumption or in production. As an example,

- A negative production externality is received in consumption when a factory which produces aluminium discharges untreated waste water into a nearby river and pollutes the water causing health hazards for people who use the water for drinking and bathing.
- A negative production externality is received in production when pollution of river affects fish output as there will be less catch for fishermen due to loss of fish resources.

The firm, however, has no incentive to account for the external costs that it imposes on consumers of river water or on fishermen when making its production decision. Additionally, these external costs are never reflected in the price of the product.

A positive production externality initiated in production that confers external benefits on others may be received in production or in consumption.

- A firm which offers training to its employees for increasing their skills generates positive benefits on other firms when they hire such workers as they change their jobs.
- A positive production externality is received in consumption when an individual raises an attractive garden and the persons walking by enjoy the garden. These external effects were not in fact taken into account when the production decisions were made.

Consumption Externalities

Negative consumption externalities initiated in consumption which produce external costs on others may be received in consumption or in production.

- smoking cigarettes in public place causing passive smoking by others, creating litter and diminishing the aesthetic value of the room and playing the radio loudly obstructing one from enjoying a concert are examples of negative consumption externalities affecting consumption
- The act of undisciplined students talking and creating disturbance in a class preventing teachers from making effective instruction and the case of excessive consumption of alcohol causing impairment in efficiency for work and production are instances of negative consumption externalities affecting production.

A positive consumption externality initiated in consumption that confers external benefits on others may be received in consumption or in production.

- if people get immunized against contagious diseases, they would confer a social benefit to others as well by preventing others from getting infected.
- Consumption of the services of a health club by the employees of a firm would result in an external benefit to the firm in the form of increased efficiency and productivity.

When there are externalities and the costs or benefits are experienced by people outside a transaction, the actors in the transaction (consumers or producers) tend to ignore those external costs or benefits.

Having discussed the nature of externalities in production and consumption, we shall now examine how externalities cause inefficiency and market failure. Before we attempt this, we need to understand the difference between private costs and social costs. Private cost is the money cost of production incurred by the firm i.e. costs such as wages, raw materials, heating and lighting which must be paid to carry out production, and these which would appear in the firm's accounts. The supply curve here corresponds to only the private marginal costs.

Social costs refer to the total costs to the society on account of a production or consumption activity. Social costs are private costs borne by individuals directly involved in a transaction together with the external costs borne by third parties not directly involved in the transaction. In other words, social costs are the total costs incurred by the society when a good is consumed or produced. It is thus private costs plus costs to third parties (i.e. private costs + total negative externalities).

$$\text{Social Cost} = \text{Private Cost} + \text{External Cost}$$

The external costs are not included in firms' income statements or consumers' decisions. However, these external costs are real and important as far as the society is concerned. As we have mentioned above, firms do not have to pay for the damage resulting from the pollution which they generate. As a result, each firm's cost which is considered for determining output would be only private cost or direct cost of production which does not incorporate externalities.

The market prices determined without incorporating externalities are not ideal as they do not reflect all social costs and benefits. Such prices send incorrect signals to producers and consumers and cause either overproduction or underproduction. Thus, we conclude that when there is externality, a competitive market will produce a level of output which is not socially optimal. This is a clear case of market failure.

2.4 PUBLIC GOODS

Paul A. Samuelson who introduced the concept of 'collective consumption good' in his path-breaking 1954 paper 'The Pure Theory of Public Expenditure' is usually recognized as the first economist to develop the theory of public goods. A public good (also referred to as collective consumption good or social good) is defined as one which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtraction from any other individuals' consumption of that good.

Most of the goods produced and consumed in an economy are private goods. Since they are scarce, anyone who wants to consume them must purchase them at a price. Private goods do not face any free-rider problem. Private goods are 'excludable' i.e. it is possible to exclude or prevent consumers who have not paid for them from consuming them or having access to them. Consumption of private goods is 'rivalrous' that is the purchase and consumption of a private good by one individual prevents another individual from consuming it. Normally, the market will efficiently allocate resources for the production of private goods. A few examples are: food items, clothing, movie ticket, television, cars, houses etc.

Public goods are products (goods or services) whose consumption is essentially collective in nature. Public good is non-rival in consumption. It means that consumption of a public good by one individual does not reduce the quality or quantity available for all other individuals. For example, if, you eat your apple, (a private good) another person too cannot eat it. But, if you walk in street light, other persons too can walk without any reduced benefit from the street light.

Public goods are non-excludable. Consumers cannot (at least at less than prohibitive cost) be excluded from consumption benefits. If the good is provided, one individual cannot deny another individuals' consumption. For example, national defence once provided, it is impossible to exclude anyone within the country from consuming and benefiting from it.

Public goods are characterized by indivisibility. Each individual may consume all of the good i.e. the total amount consumed is the same for each individual. Once a public good is provided, the additional resource cost of another person consuming the goods is 'zero'. No direct payment by the consumer is involved in the case of pure public goods. A few examples of public goods are: national defence, highways, public education, scientific research which benefits everyone, law enforcement, lighthouses, fire protection, disease prevention and public sanitation.

Public goods are generally more vulnerable to issues such as externalities, inadequate property rights, and free rider problems. The absence of excludability in the case of public goods and the tendency of people to act in their own self-interest will lead to the problem of free-riding. There is no incentive for people to pay for the good because they can consume it without paying for it. Since private goods are excludable, free-riding mostly occurs in the case of public goods.

If individuals make no offer to pay for public goods, there is market failure in the case of these goods and the profit-maximizing firms will not produce them. Producers are not motivated to produce a socially-optimal amount of products if they cannot charge a positive price for them or make profits from them. As such, though public goods are extremely valuable for the well-being of the society, left to the market, they will not be produced at all or will be grossly under-produced. Thus, there is market failure in the case of public goods.

2.5 INCOMPLETE INFORMATION

Complete information is an important element of a competitive market. Perfect information implies that both buyers and sellers have complete information about anything that may influence their decision making. However, this assumption is not fully satisfied in real markets because of

- complexity of products and services (e.g. cardiac surgery, financial products like mutual funds),
- difficulty of getting correct information, and
- deliberate misinformation by interested parties (e.g. highly persuasive advertisements). Information failure results in market failure.

2.5.1 Asymmetric Information

Asymmetric information occurs when there is an imbalance in information between the buyer and the seller i.e. when the buyer knows more than the seller or the seller knows more than the buyer. This can distort choices. For example,

- the landlords know more about their properties than the tenants,
- a borrower knows more about their ability to repay a loan than the lender,
- a used-car seller knows more about the vehicle quality than the buyer,
- health insurance buyers know more about their state of health than the insurance companies and
- some traders may possess insider information in financial markets.

These are situations in which one party to a transaction knows a material fact that the other party does not. This phenomenon is an important source of market failure. Adverse selection and moral hazard are two central concepts related to the problem of information gaps in many markets

Adverse Selection

Asymmetric information generates adverse selection and affects a transaction before it occurs. When one party to a contract or negotiation, say X, possesses information relevant to the contract or negotiation that the other party Y does not have, the expected value of the transaction is known more accurately to X due to asymmetry of information. Then, the party which has more information i.e. X may take advantage Y's ignorance and this could potentially put the ignorant party Y at a loss.

For example, in the insurance market, if the health insurance companies could costlessly identify the health risks of buyers, then there is no asymmetric information and therefore, insurers could offer low premiums to the low-risk buyers and high premiums to the high-risk buyers. As a matter of fact, compared to insurance buyers, insurance companies know less about the health conditions of buyers and are therefore unable to differentiate between high-risk and low-risk persons.

Due to the tendency of people with higher health risks to obtain insurance coverage to a greater extent than persons with lesser risk, the proportion of unhealthy people in the pool of insured people increases. In such situations, an insurance company extends insurance coverage to an applicant whose actual risk is substantially higher than the risk known by the insurance company.

By not revealing the actual state of health, an applicant is leading the insurance company to make decisions on coverage or premium costs that are 'adverse' to the insurance company's management of financial risk. Due to heavy insurance claims, the premium of insurance rises so that the more healthy people being aware of their low risks choose not to be insured. This further increases the proportion of unhealthy people among the insured, thus raising the price of insurance upwards. The process continues until most people who want to buy insurance are unhealthy.

Having more unhealthy insurance buyers make insurance very expensive. In the extreme case, the insurance companies stop selling the insurance leading to 'missing' markets. If the sellers wish to do business profitably, they may have to incur considerable costs in terms of time and money for identifying the extent of risk for different buyers which in turn would increase insurance premium.

When dealing with problems of asymmetric information, the most frequently cited and studied example in Economics is the 'lemons problem' developed by George Akerlof in relation to the used car market. Second-hand cars may be good quality cars or poor quality cars defined as "lemons". The owner of a car knows much more about its quality than anyone else. While placing it for sale, he may not disclose all that he knows about the mechanical defects of the vehicle. Based on the probability that the car on sale is a 'lemon', the buyers' willingness to pay for any particular car will be based on the 'average quality' of used cars. Since there is quality uncertainty, to account for this risk, the price offered for any used car is likely to be less.

Since the price offered in the market is lower than the acceptable one, sellers of good quality cars will not be inclined to place the car for sale in the used car market. They are kept by their owners or sold only to relatives or friends. The good-quality cars disappear from the market and the market becomes flooded with 'lemons' and eventually the market may offer nothing but 'lemons'. This is the case of market failure because the market has only lower

prices and lower average quality of cars. With asymmetric information, just as low quality high risk buyers drive out high quality low risk buyers of insurance, low-quality cars can drive high-quality cars out of the market.

Thus, asymmetric information leads to elimination of high-quality goods from the market. Economic agents end up either selecting a sub-standard product or leaving the market altogether.

Moral Hazard

Moral hazard arises whenever there is an externality (i.e., whenever an economic agent can shift some of its costs to others). It is about actions made after making a market exchange which may have adverse impact on the less-informed person. In other words, it is about the opportunism characterized by an informed person's taking advantage of a less-informed person through an unobserved action. It arises from lack of information about someone's future behaviour. It occurs when one party to an agreement knows that he need not bear the consequences of his bad behaviour or poor decision making and that the consequence, if any, would be borne by the other party. Therefore, he engages in risky behaviour or fails to act in good faith or acts in a different way than if he had to bear those consequences by himself.

In the insurance market, moral hazard refers to a situation that increases the probability of occurrence of a loss or a larger than normal loss because of a change in the insurance policy holders' behaviour after buying the policy. For example, a driver who has a comprehensive insurance tends to be less careful while driving and may increase the probability of insurance claims. When someone is protected from paying the full costs of their harmful actions, they tend to act irresponsibly, making the harmful consequences more likely.

In the case of medical insurance, the more one's costs are covered by the insurance company, the less he cares whether the doctor charges excessive fees or uses inefficient and costly procedures as part of his health care. This causes insurance premiums to rise for everyone, driving many potential customers out of the market.

If the company could costlessly monitor the behaviour of the insured, it can charge higher fees for those who make more claims. The problem lies in the fact that the insurance company cannot observe people's actions post-sale and therefore cannot judge without costly monitoring whether occurrence of an accident is genuine or the outcome of lack of caution on the part of the insured. Therefore the expected outflow in terms of insurance claims is higher and the insurance companies may be forced to increase premiums for everyone or may, at the extreme, even refuse to sell insurance at all in which case it is a case of missing markets.

Having discussed market failure in detail, we shall now look into the intervention mechanisms which governments adopt for combating market failures so as to ensure greater welfare to the society.

The existence of a free market does not altogether eliminate the need for government intervention for the efficient functioning of markets. Government can ensure economic efficiency by providing the necessary legal and regulatory system that facilitates efficiency and /or it can intervene to correct specific market failures. The role of the government is discussed below.

Government plays a vital role in ensure a well functioning market by:

- creating the necessary physical infrastructure such as roads, bridges, airports and waterways
- provision of institutional infrastructure such as legal and regulatory framework, establishment of the 'rule of law', protection of property rights, ensuring performance of contracts are to
- ensuring an appropriately framed competition and consumer law framework that regulates the activities of firms and individuals in their market exchanges

We shall try to have a discussion on the forms of government intervention to address market failure.



2.6 GOVERNMENT INTERVENTION TO MINIMIZE MARKET POWER

Because of the social costs imposed by monopoly, governments intervene by establishing rules and regulations designed to promote competition and prohibit actions that are likely to restrain competition. These legislations differ from country to country. For example, in India, we have the Competition Act, 2002 (as amended by the Competition (Amendment) Act, 2007) to promote and sustain competition in markets. The Antitrust laws in the US and the Competition Act, 1998 of UK etc are designed to promote competitive economy by prohibiting actions that are likely to restrain competition. Such legislations generally aim at prohibiting contracts, combinations and collusions among producers or traders which are in restraint of trade and other anticompetitive actions such as predatory pricing.

Other measures include:

- Market liberalisation by introducing competition in previously monopolistic sectors such as energy, telecommunication etc.
- Controls on mergers and acquisitions if there is possible market domination

- Price capping and price regulation
- Profit or rate of return regulation
- Patronage to consumer associations
- Tough investigations into cartelisation and unfair practices such as collusion and predatory pricing
- Restrictions on monopsony power of firms
- Reduction in import controls and
- Nationalisation

However, sometimes we find that governments protect monopoly positions of firms that have developed unique innovations. For example, patent and copyright laws grant exclusive rights of products or processes to provide incentives for invention and innovation.

Another example is that of permitted natural monopoly. Natural monopolies can produce the entire output of the market at a cost that is lower than what it would be if there were several firms. Examples of such natural monopoly are electricity, gas and water supplies. In order to control the market power of such natural monopolies, governments usually regulate the price of the goods and services provided by them.

2.7 GOVERNMENT INTERVENTION TO CORRECT EXTERNALITIES

As you may easily recall, freely functioning markets produce externalities because producers and consumers need to consider only their private costs and benefits and not the full social costs. To promote the overall welfare of all members of society, social returns should be maximized and social costs minimized. This implies that all costs and benefits (both private and external) need to be internalized by consumers and producers while making buying and production decisions.

An externality is internalised if the ones that generated the externality incorporate into their private or internal cost- benefit calculations the external benefits (in the case of positive externality) and external costs (in the case of negative externality) that third parties bear. In other words, the key to internalizing an externality (both external costs and benefits) is to ensure that those who create the externalities include them while making decisions.

Governments have numerous methods to reduce the effects of negative externalities and to promote positive externalities. We shall first examine how government regulation can deal with the inefficiencies that arise from negative externalities. Since the most commonly referred negative externality is pollution, we shall take it as an example in the following discussion.

Government initiatives towards negative externalities may be classified as:

1. Direct controls or regulations that openly regulate the actions of those involved in generating negative externalities, and
2. 'Market-based' policies that would provide economic incentives

Direct controls, also known as command solutions, prohibit specific activities that explicitly create negative externalities or require that the negative externality be limited to a certain level. A few examples are:

- The government may, through legislation, fix emissions standard which is the legal limit on how much pollutant a firm can emit. If the firm exceeds the limit, it can invite monetary penalties or/and criminal liabilities.
- Licensing, production quotas and mandates regarding acceptable production processes are other examples of direct intervention by governments.
- Production, use and sale of many commodities and services are prohibited in our country.
- Smoking is completely banned in many public places.
- Stringent rules are in place in respect of tobacco advertising, packaging and labeling etc.
- Governments may pass laws to alleviate the effects of negative externalities. Government stipulated environmental standards are rules that protect the environment by specifying actions by producers and consumers. For example, India has enacted the Environment (Protection) Act, 1986.
- Government may limit the amounts of certain pollutants released into water and air by individual firms or make it mandatory to use pollution control devices.
- Government may insist that the polluting firms install pollution-abatement mechanisms to ensure adherence to the emission standards. This means additional expenditure to the firm leading to rise in the firm's average cost. New firms will find it profitable to enter the industry only if the price of the product is greater than the average cost of production plus abatement expenditure.
- Governments may also form special bodies/ boards to specifically address the problem: for instance the Ministry of Environment & Forest, the Pollution Control Board of India and the State Pollution Control Boards.

The market-based approaches –environmental taxes and cap-and-trade – operate through price mechanism to create an incentive for change. In other words, the government tries to alter the prices of goods through taxes and subsidies and thus change the behaviour of market

participants. This is achieved by:

1. Setting the price directly through a pollution tax
2. Setting the price indirectly through the establishment of the cap-and-trade system.

One method of ensuring internalization of negative externalities is imposing pollution taxes. These taxes are named Pigouvian taxes after A.C. Pigou. The size of the tax depends on the amount of pollution a firm produces. These taxes have the effect of 'making the polluter pay'. Tax increases the private cost of production or consumption as the case may be, and would decrease the quantity demanded and therefore the output of the good which creates negative externality.

However, there are problems in administering an efficient pollution tax.

- Pollution taxes are difficult to determine and administer because it involves the use of complex and costly administrative procedures for monitoring the polluters.
- If the demand for the good is inelastic, the tax may have only an insignificant effect in reducing demand. In such cases, the producers will be able to easily shift the tax burden in the form of higher product prices.
- Pollution taxes also have potential negative consequences on employment and investments because high pollution taxes in one country may encourage producers to shift their production facilities to those countries with lower taxes.

The second approach to establishing prices indirectly is 'tradable emissions permits'. You might have heard of 'carbon credits'. The use of tradable permits to limit emissions is often called 'cap and trade'. A tradable permit is a license that allows a company to release a unit of pollution into the environment over some period of time. By issuing a fixed number of permits, the government determines the total level of pollution that can be legally emitted during each period (the 'cap'). Each firm has permits specifying the number of units of emissions that the firm is allowed to generate. A firm that generates emissions above what is allowed by the permit is penalized with substantial fines.

The firms can sell their government-issued permits to other firms in an organized market. Since the permits are tradable (the firm can sell for a price), a polluting firm faces an opportunity cost i.e. for each unit of pollution that it creates, it must either buy a permit, or it must forgo the revenue it could earn by selling the permit to some other firm. A firm which produces less pollution can sell their permits and earn money.

A firm whose technology would make it very costly to reduce pollution generally buys permits in the market. At the same time, a firm whose technology enables it to discharge less pollution or can reduce pollution rather cheaply will sell its permits.

The high polluters have to buy more permits, which increases their costs, and makes them less competitive and less profitable. The low polluters receive extra revenue from selling their surplus permits, which makes them more competitive and more profitable. Therefore, firms will have an incentive not to pollute.

Tradable permits have been used since the early 1980s to reduce several types of pollution in the United States. In 1994 the United States began a cap and trade system for sulphur dioxide emissions that cause acid rain by issuing permits to power plants based on their historical consumption of coal. India does not have an explicit carbon price or a market-based mechanism such as cap-and-trade; but India has many schemes and mechanisms that put an implicit price on carbon. For example, the Perform, Achieve & Trade (PAT) scheme, carbon tax in the form of a cess on coal, lignite and peat, Renewable Purchase Obligations (RPO) and Renewable Energy Certificates (REC), Internal Carbon Pricing (ICP) etc. In 2017, the coal cess was abolished and replaced by the GST compensation cess since it failed to achieve the desired outcomes. The Energy Conservation (Amendment) Bill, 2022 empowers the central government to specify a carbon credit trading scheme and to stipulate energy consumption standards.

The cap and trade method is administratively cheap and simple to implement and ensures that pollution is minimised in the most cost-effective way. The 'cap' puts a clear upper limit on the quantity of pollution that may be generated in each period. However, firms with a relatively inelastic demand for its product can easily shift the extra cost incurred for procuring additional permits in the form of higher price.

The two interventions mentioned above i.e. permits and taxes make use of market forces to encourage consumers and producers to take externalities into account when planning their consumption and production. In other words, the polluters are forced to consider pollution as a private cost.

So far we have been discussing about negative externality. We shall now look into positive externality. Though positive externality is associated with external benefits, we still call it a market failure because, left to market, there will be less than optimal output. Since positive externalities promote welfare, governments implement policies that promote positive externalities. When positive externalities are present, government may attempt to solve the problem through -

- corrective subsidies to the producers aimed at increasing the supply of the good
- corrective subsidies to consumers aimed at increasing the demand for the good.

As we are aware, a corrective production subsidy involves government paying part of the cost to the firms in order to promote the production of goods having positive externalities. This is in fact a market-based policy as subsidies to producers would lower their cost of production.

E.g. fertilizer subsidy. A subsidy on fee for education is an example of consumption subsidy.

In the case of products and services whose externalities are vastly positive, the government enters the market directly as an entrepreneur to produce and provide them. Public education, health care and fundamental research are the obvious examples. Governments also engage in direct production of environmental quality. Examples are: afforestation, reforestation, protection of water bodies, treatment of sewage and cleaning of toxic waste sites.

2.8 GOVERNMENT INTERVENTION IN THE CASE OF MERIT GOODS

Merit goods are goods that have substantial positive externalities and hence they are socially desirable. Merit goods can be provided through the market, but are likely to be under-produced and under-consumed through the market mechanism so that social welfare will not be maximized. Examples of merit goods include education, health care, welfare services, housing, fire protection, waste management, public libraries, museum, public parks etc.

The possible government responses to under-provision of merit goods are regulation, subsidies, direct government provision and a combination of government provision and market provision.

Regulation determines how a private activity may be conducted. For example, the way in which education is to be imparted is government regulated. Governments can prohibit some type of goods and activities, set standards and issue mandates making others oblige. For example, government may make it compulsory to avail insurance protection. Compulsory immunization may be insisted upon as it helps not only the individual but also the society at large. Government could also use legislation to enforce the consumption of a good which generates positive externalities. E.g. use of helmets, seat belts etc.

An additional option is to compel individuals to consume the good or service that generates the external benefit. The Right of Children to Free and Compulsory Education Act, 2009 which mandates free and compulsory education for every child of the age of six to fourteen years is another example. If suspected of having a contagious disease such as COVID, an individual may be forced to get medical treatment.

The ultimate encouragement to consume is to make the good completely free at the point of consumption: for example freely available hospital treatment for various diseases. When merit goods are directly provided free of cost by government, there will be substantial demand for the same.



2.9 GOVERNMENT INTERVENTION IN THE CASE OF DEMERIT GOODS

Demerit goods are goods which are believed to be socially undesirable. Examples of demerit goods are cigarettes, alcohol, intoxicating drugs etc. The consumption of demerit goods imposes significant negative externalities on the society as a whole. However, it should be kept in mind that all goods with negative externalities are not essentially demerit goods; e.g. Production of steel causes pollution, but steel is not a socially undesirable good.

The production and consumption of demerit goods are likely to be more than optimal under free markets. The government should therefore intervene in the marketplace to discourage their production and consumption. How do governments correct market failure resulting from demerit goods?

- At the extreme, the government may enforce complete ban on a demerit good. e.g. the possession, trading or consumption of intoxicating drugs is made illegal.
- Through persuasion which is mainly intended to be achieved by negative advertising campaigns which emphasize the dangers associated with consumption of demerit goods.
- Through legislations that prohibit the advertising or promotion of demerit goods in whatsoever manner.
- Strict regulations of the market for the good may be put in place so as to limit access to the good, especially by vulnerable groups such as children and adolescents.
- Regulatory controls in the form of spatial restrictions e.g. smoking in public places, sale of tobacco to be away from schools, and time restrictions under which sale at particular times during the day is banned.
- Imposing unusually high taxes on producing or purchasing the good making them very costly and unaffordable to many is perhaps the most commonly used method for reducing the consumption of a demerit good. Refer the GST rates in India for demerit goods, you will find how high they are.
- The government can fix a minimum price below which the demerit good should not be exchanged.

The demand for demerit goods such as, cigarettes and alcohol is often highly inelastic, so that any increase in their price resulting from additional taxation causes a less than proportionate decrease in demand. Also, sellers can always shift the taxes to consumers without losing customers.

The effect of stringent regulation such as total ban is seldom realized in the form of complete elimination of the demerit good; conversely such goods are secretly driven underground and traded in a hidden market.

2.10 GOVERNMENT INTERVENTION IN THE CASE OF PUBLIC GOODS

Direct provision of a public good by government can help overcome the free-rider problem which leads to market failure. The most important public goods like defence, establishment and maintenance of legal system, fire protection, disease prevention etc are invariably provided by the government.

Excludable public goods such as parks, universities, museums etc can be provided by government and the same can be financed through entry fees. Government may grant licenses to private firms to build a public good facility and charge fee from the user. In such cases, the government regulates the level of entry fee chargeable from the public and keeps strict watch on the functioning of the licensee to guarantee equitable distribution of welfare. Some public goods are provided by voluntary contributions and private donations by corporate entities and nongovernmental organisations.

Some goods are produced and consumed as public goods and services despite the fact that they can be produced or consumed as private goods. This is because, left to the markets and profit motives, these may prove dangerous to the society. Examples are scientific approval of drugs, production of strategic products such as atomic energy, provision of security at airports etc.

2.11 PRICE INTERVENTION: NON-MARKET PRICING

Price intervention generally takes the form of price controls which are legal restrictions on price. Price controls may take the form of either a price floor (a minimum price buyers are required to pay) or a price ceiling (a maximum price sellers are allowed to charge for a good or service). Fixing of minimum wages and rent controls are examples of such market intervention.

Government usually intervenes in many primary markets which are subject to extreme as well as unpredictable fluctuations in price. For example in India, in the case of many crops the government has initiated the Minimum Support Price (MSP) programme as well as procurement by government agencies at the set support prices. The objective is to guarantee steady and assured incomes to farmers.

When prices of certain essential commodities rise excessively, government may resort to controls in the form of price ceilings (also called maximum price) for making a resource or commodity available to all at reasonable prices. For example: maximum prices of food grains and essential items are set by government during times of scarcity.

With the objective of ensuring stability in prices and distribution, governments often intervene in grain markets by building and maintenance of buffer stocks. It involves purchases from the market during good harvest and releasing stocks during periods when production is below average.

2.12 GOVERNMENT INTERVENTION FOR CORRECTING INFORMATION FAILURE

Governments actively intervene in the market for combating the problem of market failure due to information problems and considering the importance of information in making rational choices. A few examples are:

- Government makes it mandatory to have accurate labeling and content disclosures by producers. E.g. Labeling on cigarette packets, display of nutritional information on food packages.
- Mandatory disclosure of information, for example: SEBI requires that accurate information be provided to prospective buyers of new stocks.
- Public dissemination of information to improve knowledge
- Regulation of advertising and setting of advertising standards to make advertising more responsible, informative and less persuasive.

2.13 GOVERNMENT INTERVENTION FOR EQUITABLE DISTRIBUTION

One of the most important activities of the government is to redistribute incomes so that there is equity and fairness in the society. Some common policy interventions include: progressive income tax, targeted budgetary allocations, unemployment compensation, transfer payments, subsidies, social security schemes, job reservations, land reforms, gender sensitive budgeting etc.

Government also intervenes to combat black economy and market distortions associated with a parallel black economy. Government intervention in a market that reduces efficiency while increasing equity is often justified because equity is greatly appreciated by society.

The discussion above is far from being comprehensive; yet it points toward the numerous ways in which governments intervene in the markets. However, we cannot be sure whether the government interventions would be effective or whether it would make the functioning of the economy less efficient. Government failures where government intervention in the economy to correct a market failure creates inefficiency and leads to a misallocation of scarce resources occur very often. Government failure occurs when:

- intervention is ineffective causing wastage of resources expended for the intervention
- intervention produces fresh and more serious problems

There are costs and benefits associated with any government intervention in the market, and it is important that policy makers consider all the costs and benefits of a policy intervention.

SUMMARY

- ◆ Market failure is a situation in which the free market leads to misallocation of society's scarce resources in the sense that there is either overproduction or underproduction of particular goods and services leading to a less than optimal outcome.
- ◆ There are two types of market failure: complete market failure or "missing markets" and partial market failure
- ◆ There are four major reasons for market failure. They are: market power, externalities, public goods, and incomplete information.
- ◆ Excessive market power causes the single producer or small number of producers to produce and sell less output than what would be produced in a competitive market and charge higher prices.
- ◆ Externalities also referred to as 'spill over effects', 'neighbourhood effects' 'third-party effects', or 'side-effects', occur when the actions of either consumers or producers result in costs or benefits that do not reflect as part of the market price.
- ◆ Externalities are initiated and experienced, not through the operation of the price system, but outside the market and therefore, are external to the market.
- ◆ Externalities can be positive or negative. Negative externalities occur when the action of one party imposes costs on a third party who is not part of the transaction. Positive externalities occur when the action of one party confers benefits a third party.
- ◆ The four possible types of externalities are: negative externality initiated in production which imposes an external cost on others; positive production externality, less commonly seen, initiated in production that confers external benefits on others; negative consumption externalities initiated in consumption which produce external

costs on others and positive consumption externality initiated in consumption that confers external benefits on others. Each of the above may be received by another in consumption or in production.

- ◆ Private cost is the cost faced by the producer or consumer directly involved in a transaction and includes direct cost of labour, materials, energy and other indirect overheads and does not incorporate externalities.
- ◆ Social cost is the entire cost which the society bears. $\text{Social Cost} = \text{Private Cost} + \text{External Cost}$.
- ◆ The firm or the consumer as the case may be, however, has no incentive to account for the external costs that it imposes on others.
- ◆ When firms do not have to worry about negative externalities associated with their production, the result is excess production and unnecessary social costs
- ◆ Public good (also referred to as a collective consumption good or a social good) are those which are indivisible, nonrival, non-excludable and enjoyed in common by all individuals. They are vulnerable to externalities and free rider problems.
- ◆ The incentive to let other people pay for a good or service, the benefits of which are enjoyed by an individual is known as the free rider problem.
- ◆ Private goods are 'rivalrous' 'and excludable' and less likely to have the free rider problem.
- ◆ Complete information is an essential element of competitive market.
- ◆ Asymmetric information occurs when there is an imbalance in information between the buyer and the seller i.e. when the buyer knows more than the seller or the seller knows more than the buyer. This can distort choices.
- ◆ Adverse selection is a situation in which asymmetric information about quality eliminates high-quality goods from a market. Buyers expect hidden problems in items offered for sale, leading to lower prices and the good quality items being kept off the market.
- ◆ Moral hazard is opportunism characterized by an informed person's taking advantage of a less-informed person through an unobserved action.
- ◆ Asymmetric information, adverse selection and moral hazard affect the ability of markets to efficiently allocate resources and therefore, lead to market failure because the party with better information has a competitive advantage.
- ◆ Governments intervene in various ways to correct market failure.

- ◆ Because of the social costs imposed by monopoly, governments intervene by establishing rules and regulations designed to promote competition and prohibit actions that are likely to restrain competition.
- ◆ Natural monopolies such as electricity, gas and water supplies are usually subject to price controls.
- ◆ Government initiatives towards combating market failures due to negative externalities are either direct controls or market-based policies.
- ◆ Direct controls prohibit specific activities that explicitly create negative externalities or require that the negative externality be limited to a certain level, for instance limiting emissions.
- ◆ Government may pass laws to alleviate the effects of negative externalities or fix emissions standard which is a legal limit on how much pollutant a firm can emit. It may charge emission fee which is levied on each unit of a firm's emissions.
- ◆ The market-based approaches– environmental taxes and cap-and-trade – operate through price mechanism to create an incentive for change.
- ◆ The key is to internalizing an externality (both external costs and benefits) is to ensure that those who create the externalities include them while making decisions.
- ◆ One method of ensuring internalization of negative externalities is imposing pollution taxes. (Pigouvian taxes). By 'making the polluter pay', pollution taxes seek to internalize external costs into the price of a product or activity.
- ◆ Pollution taxes are difficult to determine and administer due to difficulty to discover the right level of taxation, problems associated with inelastic nature of demand for the good and the problem of possible capital flight.
- ◆ Tradable emission permits are marketable licenses to emit limited quantities of pollutants and can be bought and sold by polluters. The high polluters have to buy more permits and the low polluters receive extra revenue from selling their surplus permits.
- ◆ The system is administratively cheap and simple, allows flexibility and reward efficiency and provides strong incentives for innovation.
- ◆ Subsidy is a market-based policy and involves the government paying part of the cost to the firms in order to promote the production of goods having positive externalities.
- ◆ Merit goods such as education, health care etc are socially desirable and have substantial positive externalities. Left to the market, merit goods are likely to be under-produced and under- consumed so that social welfare will not be maximized.

- ◆ The possible government responses to under-provision of merit goods are regulation, legislation, subsidies, direct government provision and a combination of government provision and market provision.
- ◆ Demerit goods are goods which impose significant negative externalities on the society as a whole and are believed to be socially undesirable. The production and consumption of demerit goods are likely to be more than optimal under free markets.
- ◆ Steps taken by government to limit demerit goods include complete ban of the good, legislations, persuasion and advertising campaigns, limiting access to the good, especially by vulnerable groups.
- ◆ In the case of non excludable pure public goods where entry fees cannot be charged, direct provision by governments through the use of general government tax revenues is the only option.
- ◆ A very commonly followed method in the case of excludable public good is to grant licenses to private firms to build a facility and then the government regulates the level of the entry fee chargeable from the public.
- ◆ Due to strategic and security reasons, certain goods are produced and consumed as public goods and services despite the fact that they can be produced or consumed as private goods.
- ◆ Price controls may take the form of either a price floor (a minimum price buyers are required to pay) or a price ceiling (a maximum price sellers are allowed to charge for a good or service).
- ◆ When prices of certain essential commodities rise excessively government may resort to controls in the form of price ceilings (also called maximum price) for making a resource or commodity available to all at reasonable prices.
- ◆ With the objective of ensuring stability in prices and distribution, governments often intervene in grain markets through building and maintenance of buffer stocks.
- ◆ Government failure occurs when intervention is ineffective causing wastage of resources expended for the intervention and/or when intervention produces fresh and more serious problems. This creates inefficiency and leads to a misallocation of scarce resources.

TEST YOUR KNOWLEDGE

Multiple Choice Questions

1. 'Market failure' is a situation which occurs when
 - (a) private goods are not sufficiently provided by the market
 - (b) public goods are not sufficiently provided by public sector
 - (c) The market fail to form or they allocate resources efficiently
 - (d) (b) and (c) above
2. Which of the following is an example of market failure?
 - (a) Prices of goods tend to rise because of shortages
 - (b) Merit goods are not sufficiently produced and supplied
 - (c) Prices fall leading to fall in profits and closure of firms
 - (d) None of the above
3. Which of the following is an outcome of market power?
 - (a) makes price equal to marginal cost and produce a positive external benefit on others
 - (b) can cause markets to be efficient due to reduction in costs
 - (c) makes the firms price makers and restrict output so as to make allocation inefficient
 - (d) (b) and(c) above
4. Markets do not exist
 - (a) for goods which have positive externalities
 - (b) for pure public goods
 - (c) for goods which have negative externalities
 - (d) none of the above
5. Which of the following is the right argument for provision of public good by government?
 - (a) Governments have huge resources at their disposal
 - (b) Public goods will never cause any type of externality
 - (c) Markets are unlikely to produce sufficient quantity of public goods

- (d) *Provision of public goods are very profitable for any government*
6. *Adequate amount of a pure public good will not be provided by the private market because of*
- (a) *the possibility of free riding*
 - (b) *the existence of very low prices and low profits*
 - (c) *governments would any way produce them, so there will be overproduction*
 - (d) *there are restrictions as well as taxes on production of public goods*
7. *The free rider problem arises because of*
- (a) *ability of participants to produce goods at zero marginal cost*
 - (b) *marginal benefit cannot be calculated due to externalities present*
 - (c) *the good or service is non excludable*
 - (d) *general poverty and unemployment of people*
8. *A chemical factory has full information regarding the risks of a product, but continues to sell it. This is possible because of*
- (a) *asymmetric information*
 - (b) *moral hazard*
 - (c) *free riding*
 - (d) *(a) and (c) above*
9. *If an individual tends to drive his car in a dangerously high speed because he has a comprehensive insurance cover, it is a case of*
- (a) *free riding*
 - (b) *moral hazard*
 - (c) *poor upbringing*
 - (d) *Inefficiency*
10. *Smoking in public is a case of*
- (a) *Negative consumption externality*
 - (b) *Negative production externality*
 - (c) *Internalising externality*
 - (d) *None of the above*

11. Read the following statements

- I The market-based approaches to control externalities operate through price mechanism
- II. When externalities are present, the welfare loss would be eliminated
- III. The key to internalizing an externality is to ensure that those who create the externalities include them while making decisions

Of the above statements

- (a) II and III are correct
 - (b) I only is correct
 - (c) II only is correct
 - (d) I and III are correct
12. Which of the following statements is false?
- (a) Tradable permits provide incentive to innovate and reduce negative externalities
 - (b) A subsidy on a good which has substantial positive externalities would reduce its cost and consequently its price would be lower
 - (c) Substantial negative externalities are involved in the consumption of merit goods.
 - (d) Merit goods are likely to be under-produced and under consumed through the market mechanism
13. Which one of the following would you suggest for reducing negative externality?
- (a) Production subsidies
 - (b) Excise duty
 - (c) Pigouvian taxes
 - (d) All of the above
14. A Pigouvian subsidy
- (a) cannot be present when externalities are present
 - (b) is a good solution for negative externality as prices will increase
 - (c) is not measurable in terms of money and therefore not practical
 - (d) may help production to be socially optimal when positive externalities are present

15. *If governments make it compulsory to avail insurance protection, it is because*
- (a) *Insurance companies need to be running profitably*
 - (b) *Insurance will generate moral hazard and adverse selection*
 - (c) *Insurance is a merit good and government wants people to consume it*
 - (d) *None of the above*
16. *The Competition Act, 2002 aims to -*
- (a) *protect monopoly positions of firms that have developed unique innovations*
 - (b) *to promote and sustain competition in markets*
 - (c) *to determine pricing under natural monopoly.*
 - (d) *None of the above*
17. *Rules regarding product labelling*
- (a) *Seeks to correct market failure due to externalities*
 - (b) *Is a method of solving the problem of public good*
 - (c) *May help solve market failure due to information failure*
 - (d) *Reduce the problem of monopolies in the product market*
18. *Identify the incorrect statement*
- (a) *A minimum support price for agricultural goods is a market intervention method to guarantee steady and assured incomes to farmers.*
 - (b) *An externality is internalised if the ones that generated the externality incorporate them into their private cost- benefit analysis*
 - (c) *The production and consumption of demerit goods are likely to be less than optimal under free markets*
 - (d) *Compared to pollution taxes, the cap and trade method is administratively cheap and simple to implement and ensures that pollution is minimised in the most cost-effective way.*
19. *The incentive to let other people pay for a good or service, the benefits of which are enjoyed by an individual*
- (a) *Is a case of negative externality*
 - (b) *Is a case of market efficiency*
 - (c) *Is a case of free riding*

- (d) *Is inappropriate and warrant action*
20. *A government subsidy*
- (a) *is a market-based policy*
 - (b) *involves the government paying part of the cost to the firms in order to promote the production of goods having positive externalities*
 - (c) *is generally provided for merit goods*
 - (d) *all the above*
21. *The production and consumption of demerit goods are*
- (a) *likely to be more than optimal under free markets.*
 - (b) *likely to be less than optimal under free markets*
 - (c) *likely to be subjected to price intervention by government*
 - (d) *a) and c) above*
22. *The argument for education subsidy is based on*
- (a) *Education is costly*
 - (b) *the ground that education is merit good*
 - (c) *education creates positive externalities*
 - (d) *b) and c) above*
23. *Read the following statements*
- I. *Social costs are the total costs incurred by the society when a good is consumed or produced.*
 - II. *The external costs are not included in firms' income statements or consumers' decisions*
 - III. *Each firm's cost which is considered for determining output would be only private cost or direct cost of production which does not include external costs*
 - IV. *Production and consumption decisions are efficient only when private costs are considered*
- Of the above*
- (a) *Statements I and III are correct*
 - (b) *Statements I,II and III are correct*
 - (c) *Statement I only is correct*

- (d) *All the above are correct*
24. *Government failure occurs when*
- (a) *Government fails to implement its election promises on policies*
- (b) *A government is unable to get reelected*
- (c) *Government intervention is ineffective and produces fresh and more serious problems*
- (d) *None of the above*

ANSWERS

1.	(c)	2	(b)	3	(c)	4.	(b)	5.	(c)	6.	(a)
7.	(c)	8.	(a)	9.	(b)	10.	(a)	11.	(d)	12.	(c)
13.	(c)	14.	(d)	15.	(c)	16.	(b)	17.	(c)	18.	(c)
19.	(c)	20.	(d)	21.	(d)	22.	(d)	23.	(b)	24.	(c)

UNIT – 3: THE PROCESS OF BUDGET MAKING: SOURCES OF REVENUE, EXPENDITURE MANAGEMENT AND MANAGEMENT OF PUBLIC DEBT

LEARNING OUTCOMES

After studying this Chapter, you will be able to –

- ◆ Define government budget and explain the need and objectives of budget
- ◆ Describe the budget concepts and terminologies
- ◆ Illustrate the process of budget making
- ◆ Detail the different sources of government revenue and expenditure
- ◆ Elucidate the process of management of public debt

CHAPTER OVERVIEW



3.1 INTRODUCTION

Governments all over the world have to perform manifold functions from protecting their territories, maintaining law and order, provision of public goods and implementation of comprehensive plans for economic and social welfare of its citizens. To execute these functions efficiently, the government requires adequate financial resources. Budget is a powerful policy instrument in the hands of government to regulate and to restructure a country's economic priorities.

The need for budgeting arises from the need to efficiently allocate limited resources to ensure maximum social welfare. The government also needs to reallocate resources in accordance with its declared priorities. By proper budgeting, the government is able to ensure redistribution of income and wealth. The other objectives of budgets are reduction/elimination of economic fluctuations to bring in stability, sustainable increase in real GDP and reduction in regional disparities.

In simple terms, a budget is a statement that presents the details of 'where the money comes from' and 'where the money goes to'. The government budget is a document presented for approval and legislation by a government and contains estimates of the proposed expenditure for a given period and the proposed means of financing them. In other words, a government budget is a schedule of the entire revenues and expenditures that the government expects to receive and plans to spend during the following year. The budget includes projections for the economy and its various sectors such as agriculture, industry, and services. The budget also contains estimates of the government's accounts for the next fiscal year called budgeted estimates. Being the document which consolidates revenues from all sources and outlays for all activities, the budget is the most comprehensive report of the government's finances.

Apart from the union budget, state and the local bodies have their own budgetary processes for the next financial year. However, the focus of this unit will be the union budget only.



3.2 THE PROCESS OF BUDGET MAKING

The budgetary process is the means by which the executive and legislative branches together formulate a coherent set of taxing and spending proposals. The finances of the government of India have traditionally been controlled by the Ministry of Finance. The budget is prepared by the Ministry of Finance in consultation with NITI Aayog and other relevant ministries. The budget must be presented and approved by both houses of parliament before the beginning of the fiscal year (April 1 to March 31).

Despite the fact that the term 'budget' has not been used in the Indian Constitution, the process of making it is generally referred to as budgeting. Article 112 of the constitution provides that in respect of every financial year the 'president shall cause to be laid before both the houses of parliament a statement of the estimated receipts and expenditure of the government of India for that year, referred to as the "Annual Financial Statement"'.

The budgetary procedures are -

- (i) Preparation of the budget
- (ii) Presentation and enactment of the budget and
- (iii) Execution of the budget.

The budget process mainly consists of two types of activities:

1. The administrative process, wherein the budget along with the accompanying documents are prepared in consultation with various stakeholders;
2. The legislative process wherein the budget is passed by the parliament after discussions.

Despite the fact that the union budget is presented on 1st February (or any other suitable date as decided by the government), the process of budget preparation commences in August-September of the previous year. The Budget Division of the Ministry of Finance prepares a comprehensive schedule for carrying out the budget preparation activities.

The process of budget making is set off with the Budget Division issuing the budget circular containing detailed instructions and formats for preparing the estimates to all ministries, states, union territories and autonomous bodies. The detailed estimates of expenditure are prepared by ministries and departments according to their assessment of requirements for the subsequent year. Every department prepares estimates for receipts and expenditure separately.

A series of pre-budget consultations are done by the union finance minister with the finance ministers and chief ministers of states, various stakeholders and interest groups including industry associations, representatives from agriculture and social and welfare sectors, labour organisations, experts from NITI Aayog, economists etc. to elicit their suggestions on the proposed budget.

The budget is presented in the Parliament in such form as the Finance Ministry may decide after considering the suggestions (if any) of the Estimates Committee. Broadly, the budget documents depict information relating to receipts and expenditure for two years. They are:

- (i) Budget estimates (BE) of receipts and expenditure in respect of current and ensuing financial year
- (ii) For the current year through Revised Estimates (RE); and
- (iii) Actuals of the year preceding the current year

The budget speech is mainly a policy document which draws attention to the proposed policies and programmes of the government. The finance minister makes a detailed budget speech at the time of presenting the budget before the Lok Sabha. The budget speech present details of the proposals for the new financial year regarding taxation, borrowings and expenditure plans of the government.

The budget speech of the Finance Minister is usually in two parts.

- Part A of the budget speech gives an outline of the prevailing macro economic situation of the country and the budget estimates for the next financial year. Elaborating the priorities of the government, the minister presents a broad framework of the total funds raised by the government via taxes or borrowings, proposed government expenditure allocations for different sectors and fresh schemes for different sectors.
- Part B of the budget speech details the progress the government has made on various developmental measures, the direction of future policies and the government's tax proposals for the upcoming financial year including variations in the current taxation system.

The Annual Financial Statement shows the receipts and expenditure of government in three separate parts under which government accounts are maintained, namely:

1. Consolidated Fund of India
2. Contingency Fund of India, and the
3. Public Account.

The list of budget documents presented to the parliament, besides the finance minister's budget speech, is given below:

- (a) Annual Financial Statement (AFS)
- (b) Demands for Grants (DG)
- (c) Finance Bill
- (d) Statements mandated under FRBM Act:
 - i. Macro -Economic Framework Statement
 - ii. Medium-Term Fiscal Policy cum Fiscal Policy Strategy Statement

Nine other documents which are in the nature of explanatory statements supporting the mandated documents are also presented along with the documents mentioned above.

The expenditures of certain categories (e.g. the emoluments and allowances of the President of India and his/her office, and emoluments of Judges of supreme courts and high ranking personnel of constitutional bodies across India) are 'charged' on the Consolidated Fund of India and are not subject to the vote of parliament, are also indicated separately in the budget.

By convention in an election year, the budget may be presented twice. The first one is to first to secure a Vote on Account for a few months. This is followed by the Annual financial statement for that year or the full-fledged Budget.

The budget is discussed in two stages in the Lok Sabha. First, there is the general discussion on the budget as a whole. After the first stage of general discussion on the union budget is over, the house is adjourned for a fixed period. During this period, the demands for grants of various ministries/ departments are considered by the standing committees concerned, and once the reports are presented by these committees within the stipulated time, the house proceeds to discussion and conducts ministry-wise voting on demands for grants.

The Lok Sabha has the power to concur or to refuse any demand or even to reduce the amount of grant sought by government. The budget is laid on the table of the Rajya Sabha soon after the Finance Minister has completed her/his budget speech in the Lok Sabha. The Rajya Sabha, does not vote on the demands for grants and there is only a general discussion on the budget.

After the general discussion on the budget proposals and voting on demands for grants have been completed, the government introduces the Appropriation Bill. The Appropriation Bill is intended to give authority to government to incur expenditure from and out of the Consolidated Fund of India. Motions for reduction to various demands for grants are made in the form of 'cut motions' seeking to reduce the sums sought by government.

The Finance Bill seeking to give effect to the government's taxation proposals is introduced in Lok Sabha immediately after the presentation of the general budget. It is accompanied by a memorandum explaining the provisions of the bill and their effect on the finances of the country. The motion for leave to introduce a finance bill cannot be opposed. The finance bill is taken up for consideration and passing after the Appropriation Bill is passed. The finance bill seeks to give effect to the financial proposals of the government for the next financial year. The Parliament has to pass the Finance Bill within 75 days of its introduction.

On the last day of the days allotted for discussion on the demands for grants, the speaker puts all the outstanding demands for grants to the vote of the house. This process is known as 'Guillotine'. It is a device for bringing the debate on financial proposals to an end within a specified time.

After the Finance Bill has been passed by the Lok Sabha, it is transmitted to the Rajya Sabha for its recommendations. The bill being a money bill, Rajya Sabha has to return it within a period of 14 days, with or without recommendations. The recommendations of Rajya Sabha may be accepted or rejected by the Lok Sabha.

However from 2017-18, the date of presentation of the budget has been advanced to 1st February. An important budgetary reform was the merger of railway budget with the general budget from the budget for financial year 2017-18.

3.3 SOURCES OF REVENUE

The Department of Revenue of the Ministry of Finance exercises control in respect of the revenue matters relating to direct and indirect union taxes. The department is also entrusted with the administration and enforcement of regulatory measures provided in the enactments concerning goods and services tax (GST), central sales tax, stamp duties and other relevant fiscal statutes.

The Department of Revenue exercises control in respect of matters relating to all the direct and indirect union taxes through two statutory boards, namely,

1. the Central Board of Direct Taxes (CBDT) and
2. the Central Board of Indirect Taxes and Customs (CBIC).

Matters relating to the levy and collection of all direct taxes are looked after by the CBDT whereas those relating to levy and collection of goods and service taxes (GST), Customs and central excise duties, service tax and other Indirect taxes fall within the purview of the CBIC.

Government receipts are classified under two categories:

1. Revenue receipts which consists of tax revenue and non tax revenue.
2. Capital receipts which consists of debt receipts and non debt capital receipts

The broad sources of revenue are:

1. Corporation tax
2. Taxes on income
3. Wealth tax
4. Customs duties
5. Union excise duties
6. Goods and services tax including GST compensation cess
7. Taxes on union territories

Centre's net tax revenue is the total of tax revenue after paying of the states' share and the National Calamity Contingent duty (NCCD) transferred to the National Calamity Contingency

Non-tax revenues comprise the following:

1. Interest receipts,
2. Dividends and profits from public sector enterprises and surplus transfers from Reserve Bank of India

3. Other Non-tax revenues and
4. Receipts of union territories

Various social services provided by the government such as medical services, public health: broadcasting, education, sports, art and culture, housing: and economic services such as communication, energy, transport, science, technology and environment, railways and general administrative services also yield revenue for the government.

Capital Receipts include:

1. Non debt capital receipts which include
 - (a) Recoveries of loans and advances
 - (b) Miscellaneous capital receipts (disinvestments and others)
2. Debt capital receipts which include
 - (a) Market loans for different purposes
 - (b) Short term /Treasury bill borrowings
 - (c) Securities issued against small savings,
 - (d) State provident fund (Net)
 - (e) Net external debts
 - (f) Other receipts (Net)

In short, non debt receipts include recoveries of loans advanced by the government to PSEs, state governments, foreign governments and union territories and sale proceeds of government assets, including those realized from divestment of government equity in public sector undertakings (PSUs). Debt capital receipts comprise of market loans and short term borrowings by the government, borrowing from the Reserve Bank of India and loans taken from foreign governments/institutions. Examples of 'Other receipts' include Sovereign Gold Bond Scheme, receipts from international financial institutions and saving bonds.

3.4 PUBLIC EXPENDITURE MANAGEMENT

In view of the limited nature of resources, a prudent and well designed public expenditure management is essential for any government to ensure that the level of aggregate public expenditure is consistent with a sustainable macroeconomic framework. Developing economies like India require enormous amount of public spending to initiate and accelerate economic growth and to promote employment opportunities. Effective reduction in fiscal deficit requires an ingenious mix of revenue and expenditure policies. Government

expenditure affects allocation of resources among various uses and therefore, great care should be taken to channelize the resources to socially desirable areas.

Public expenditure management is the process that allows governments to be fiscally responsible. Public expenditure programmes or projects should be designed and implemented to provide given levels of outputs or achieve specific objectives at minimum cost. The economic costs of unproductive public expenditures can be extensive and may have far reaching effects such as:

- larger deficits
- higher levels of taxation,
- lower economic growth,
- fewer resources available for use elsewhere, and
- greater debt burden in the future.

The Department of Expenditure of the Ministry of Finance is the nodal department for overseeing the public financial management system in the central government and matters connected with state finances. It is responsible for

- the implementation of the recommendations of the Finance Commission and the Central Pay Commission,
- monitoring of audit comments/observations, and
- preparation of central government accounts.
- Additionally, it also assists central ministries/departments in
- controlling the costs and prices of public services,
- reviewing systems and procedures to optimize outputs and outcomes of public expenditure.

The requirements of funds for all categories of expenditure including various programmes and schemes, along with receipts of the departments are discussed during the pre-budget meetings chaired by Secretary (Expenditure). Expenditure estimates are provisionally finalized and communicated to ministries/departments after the approval of Finance Minister. One of the explanatory documents of the budget document is the 'Expenditure Profile' (earlier known as expenditure budget) consisting of relevant data across all ministries/departments to outline a profile of the general financial performance of the government of India. It gives an aggregation of various types of expenditure and certain other items across demands.

The total expenditure through budget (both current and capital) of various ministries and departments is composed of central expenditure and transfers. In Expenditure budget, the

Central government expenditure is classified into six broad categories as below:

A. Centre's Expenditure:

- Establishment Expenditure of the Centre;
- Central sector schemes, and
- Other central expenditures including those on CPSEs and Autonomous Bodies

B. Centrally Sponsored Schemes and other Transfers:

The transfers include

- Centrally sponsored schemes
- Finance Commission transfers and
- Other transfers to states

Establishment expenditure includes establishment-related expenditure of the ministries/departments, and attached and subordinates offices. Central Sector Schemes (CS) include those schemes which are entirely funded and implemented by the central agencies under union government ministries/departments.

3.5 PUBLIC DEBT MANAGEMENT

In emerging market and developing economies, the government is generally the largest borrower. Government debt from internal and external sources contracted in the Consolidated Fund of India is defined as Public Debt. The government raises funds primarily from the domestic market using market-based and fixed-rate instruments to finance its fiscal deficit.

Public debt, in simple words, means debt incurred by the government in mobilizing savings of the people in the form of loans, which are to be repaid at a future date with interest. Public debt is not a one-time exercise of borrowing and repaying. Debt servicing is a continuous exercise as a portion of debt falls due each month, government does not usually cut expenditure or raise taxes to provide funds to retire or repay the maturing bonds. Rather, the government simply refinances the debt, i.e. it sells new bonds and uses the proceeds to pay off holders of the maturity bonds. Hence public debt management becomes a crucial task or responsibility of the government and plays an important role in macroeconomic stability of a country. Productive use of public debt contributes to economic growth and welfare of the society. Sustainability of sovereign debt has always been an important indicator of the overall macroeconomic health of a country. Debt sustainability is in great part a function of the level of debt and the government's capacity to service the outstanding debt.

Public debt management refers to the task of determining, by the fiscal and monetary authorities, the size and composition of debt, the maturity pattern, interest rates, redemption of debt etc. It is the process of setting up and implementing the strategy for managing public debt in order to raise the required amount of funding at the desired risk and cost levels.

The overall objective of the central government's debt management policy is to "meet the central government's financing needs at the lowest possible long term borrowing costs and also to keep the total debt within sustainable levels. Additionally, it aims at supporting development of a well-functioning and vibrant domestic bond market".

Keeping in view the increasing magnitude of public borrowing both internal and external, the extent to which the government can mobilise funds from public depends upon the skilful public debt management. Debt management strategy is based on three broad pillars namely, low cost of borrowing, risk mitigation and market development.

The institutions responsible for public debt management are:

1. Reserve Bank of India – domestic marketable debt i.e., dated securities, treasury bills and cash management bills.
2. Ministry of Finance (MOF); – external debt
3. Ministry of Finance; Budget Division and Reserve Bank of India – Other liabilities such as small savings, deposits, reserve funds etc.

The responsibility of managing the domestic debt of the central government and of 28 state governments and two union territories is entrusted with the Internal Debt Management Department (IDMD) of the Reserve Bank of India. The RBI acts as the debt manager for marketable internal debt. While treasury bills are issued to meet short term cash requirements of the government, dated securities are issued to mobilise longer term resources to finance the fiscal deficit. From 1997 onwards, the Reserve Bank also provides short-term credit up to three months to state governments banking with it in the form of Ways and Means Advances (WMA) to bridge temporary mismatches in cash flows.

External debt (bilateral and multilateral loans) is managed by the Department of Economic Affairs in the Ministry of Finance (MoF). Most of the external debt is sourced from multilateral agencies (International Bank for Reconstruction and Development, Asian Development Bank, etc.). There is no sovereign borrowing from international capital markets. The entire external debt, in terms of original maturity, is on long -term basis and a major part is at fixed interest rates. The risk associated with external the debt is the depreciation in the value of the domestic currency vis-à-vis the currency of denomination of external loans leading to increase in the government's debt servicing cost.

The Fiscal Responsibility and Budget Management (FRBM) was passed in 2003 to provide a legislative framework for reduction of deficit and thereby debt of the central government to a sustainable level. The objectives of the act are:

- inter-generational equity in fiscal management,
- long run macroeconomic stability,
- better coordination between fiscal and monetary policy, and
- transparency in fiscal operation of the government.

The Public Debt Management Cell (PDMC) was created in 2016 under the Department of Economic Affairs. The Medium Term Debt Management Strategy or MTDS 2021-24 is a framework to determine the appropriate composition of the debt portfolio. The objective of the debt management strategy is to efficiently raise debt at the lowest possible cost in the medium term while ensuring that financing requirements are met without disruption.

The sheer size of India's public debt can be understood from the following table:

Debt Position of the Government of India (in ₹ crores)

	As on 31 st March 2023	As on 31 st March 2024
Internal debt and other liabilities	147,77,724.43	164,23,983.04
External debt#	4,83,397.69	5,22,683.81
Total	152,61,122.12	169,46,666.85

Source: Budget 2023-2024

In line with the global trend, the government of India also responded to the pandemic challenges and increased its expenditure on health and social sector. At the same time, the revenue receipts declined substantially due to the adverse effects of the pandemic on economic activity. Consequently, fiscal deficit widened necessitating an increase in the size of the borrowing programme significantly during 2020-21 and 2021-22 in order to render counter-cyclical fiscal policy support and to provide targeted support to segments deeply hit by the pandemic.

The Reserve Bank has been proactively engaged in the development of the government securities (G-sec) market including broadening of investor participation. As part of continuing efforts to increase retail participation in G-sec, 'RBI Retail Direct' facility was announced on February 5, 2021:

- for improving the ease of access by retail investors through online access to the primary and secondary government securities market

- to provide the facility to open their government securities account ('Retail Direct') with the Reserve Bank.

Budget concepts

Type of budgets

Balanced budget: - A balanced budget is a budget in which revenues are equal to expenditures. Thus, neither a budget deficit nor a budget surplus exists. Revenue does not fall short of expenditure. i.e., revenue is equal to expenditure (Revenue= Expenditure).

Unbalanced budget: The budget may either be surplus or deficit.

- A **surplus budget:** when estimated government receipts are more than the estimated government expenditure it is termed as surplus budget. When the government spends less than the receipts the budget becomes surplus. Briefly put, public revenue exceeds public expenditure ($R > E$.)
- A **deficit budget:** when estimated government receipts are less than the government expenditure, it is termed as a deficit budget. A deficit budget increases the liability of the government or decreases its reserves. In modern economies, most of the countries follow deficit budgeting.

Capital Receipts

Capital receipts are those receipts that lead to a reduction in the assets or an increase in the liabilities of the government. Examples include recoveries of loans, earnings from disinvestment and debt.

Revenue Receipts

Revenue receipts can be defined as those receipts which neither create any liability nor cause any reduction in the assets of the government. There are two sources of revenue receipts for the government — tax revenues and non-tax revenues.

Revenue Expenditure

Revenue expenditure is expenditure incurred for purposes other than creation of physical or financial assets of the central government. It relates to those expenses incurred for the normal functioning of the government departments and various services, interest payments on debt incurred by the government, and grants given to state governments and other parties (even though some of the grants may be meant for creation of assets).

Capital Expenditure

There are expenditures of the government which result in creation of physical or financial assets or reduction in financial liabilities. This includes expenditure on the acquisition of land, building, machinery and equipment, investment in shares, and loans and advances by the

central government to state and union territory governments, PSUs and other parties.

When a government spends more than it collects by way of revenue, it incurs a budget deficit. There are various measures that capture government deficit and they have their own implications for the economy.

Budgetary Deficit or Overall Deficit

Budgetary Deficit is defined as the excess of total estimated expenditure over total estimated revenue is the difference between all receipts and expenditure, both revenue and capital.

Revenue Deficit

The revenue deficit refers to the excess of government's revenue expenditure over revenue receipts. It shows the shortfall of government's current receipts over current expenditure. It shows the government revenue is insufficient to meet the regular expenditures in connection with the normal functioning of the government, or the government is diverting resources from other sectors to finance its current expenditure.

$$\text{Revenue deficit} = \text{Revenue expenditure} - \text{Revenue receipts}$$

Fiscal Deficit

When the government's non-borrowed receipts fall short of its entire expenditure, it has to borrow money from the public to meet the shortfall. The excess of total expenditure over total receipts excluding borrowings during a given fiscal year is called the fiscal deficit. In other words, fiscal deficit is the difference between the government's total expenditure and its total receipts excluding borrowing. It is often presented as a percentage of the gross domestic product (GDP).

Total Receipts excluding borrowing = Revenue Receipts + Capital Receipts excluding borrowing or (Non debt creating capital receipts). Non debt creating capital receipts include recoveries of loans advanced by the government and sale proceeds of government assets, including those realized from divestment of government equity in public sector undertakings (PSUs).

$$\text{Fiscal deficit} = \text{Total Expenditure} - \text{Total Receipts excluding borrowing}$$

$$\text{Fiscal Deficit} = (\text{Revenue Expenditure} + \text{Capital Expenditure}) - (\text{Revenue Receipts} + \text{Capital Receipts excluding borrowing})$$

$$\text{Fiscal Deficit} = (\text{Revenue Expenditure} - \text{Revenue Receipts}) + (\text{Capital Expenditure} - \text{Capital Receipts excluding borrowing})$$

$$\text{Fiscal Deficit} = \text{Revenue Deficit} + (\text{Capital Expenditure} - \text{Capital Receipts excluding borrowing})$$

The fiscal deficit will have to be financed by borrowing. Therefore fiscal deficit points to the total borrowing requirements of the government from all sources. In case revenue deficit occupies a substantial share of fiscal deficit, it is an indication that a large part of borrowing is used for consumption purposes rather than for investment.

Primary Deficit

Primary deficit is defined as fiscal deficit of current year minus interest payments on previous borrowings. In other words whereas fiscal deficit indicates borrowing requirement inclusive of interest payment, primary deficit indicates borrowing requirement exclusive of interest payment. It tells how much of the government's borrowings are going towards meeting expenses other than interest payments. Primary deficit thus gives an estimate of borrowings on account of current expenditure exceeding current revenues. The goal of measuring primary deficit is to focus on present fiscal imbalances.

$$\text{Primary deficit} = \text{Fiscal deficit} - \text{Net Interest liabilities}$$

Net interest liabilities interest payments minus interest receipts by the government on domestic lending.

Finance Bill

The Bill produced immediately after the presentation of the union budget detailing the Imposition, abolition, alteration or regulation of taxes proposed in the budget.

Outcome budget

The outcome budget establishes a direct link between budgetary allocations of schemes and its annual performance targets measured through output and outcome indicators. The outcome budget is a progress card on what various ministries and departments have done with the outlays in the previous annual budget. It measures the development outcomes of all government programs and whether the money has been spent for the purpose it was sanctioned including the outcome of the fund usage.

Guillotine

The parliament has very limited time for examining the expenditure demands of all the ministries. So, once the prescribed period for the discussion on demands for grants is over, the speaker of Lok Sabha puts all the outstanding demands for grants, whether discussed or not, to the vote of the house. This process is popularly known as 'Guillotine'.

Cut Motions

Motions for reduction to various demands for grants are made in the form of cut motions seeking to reduce the sums sought by government on grounds of economy or difference of opinion on matters of policy or just in order to voice a grievance.

Consolidated Fund of India

All revenues received, loans raised and all moneys received by the government in repayment of loans are credited to the Consolidated Fund of India and all expenditures of the government are incurred from this fund. Money can be spent through this fund only if appropriated by the parliament. The consolidated Fund has further been divided into 'revenue' and 'capital' divisions.

Contingency Fund of India

A fund placed at the disposal of the President to enable him/her to make advances to the executive/Government to meet urgent unforeseen expenditure. Contingency fund enables the government to meet unforeseen expenditure and does not require prior legislative approval, unlike with the Consolidated Fund. For meeting such exigencies, advances are made to the executive from the contingency fund which is subsequently reported to the Parliament for recoupment from the Consolidated Fund of India.

Public Account

Under provisions of Article 266(1) of the Constitution of India, public account is used in relation to all the fund flows where government is acting as a banker. Examples include Provident Funds and Small Savings. This money does not belong to government but is to be returned to the depositors. The expenditure from this fund need not be approved by the parliament.

TEST YOUR KNOWLEDGE

Multiple Choice Questions

- The difference between the budget deficit of a government and its debt service payments is
 - Fiscal deficit
 - Budget deficit
 - Primary deficit
 - None of the above

The following hypothetical figures relate to country A

₹ Crores

Revenue receipts	20,000
Recovery of loans	1,500

<i>Borrowing</i>	15,000
<i>Other Receipts</i>	5,000
<i>Expenditure on revenue account</i>	24,500
<i>Expenditure on capital account</i>	26,000
<i>Interest payments</i>	2,000

2. *The revenue deficit for country A is*
- (a) 5,000
 - (a) 24,000
 - (c) 4,500
 - (d) None of the above
3. *Fiscal deficit of country A is*
- (a) 14,000
 - (b) 24,000
 - (c) 23,500
 - (d) None of the above
4. *Primary deficit of Country A is*
- (a) 26,000
 - (b) 26,500
 - (c) 22,000
 - (d) 24,500
5. *In NITI Aayog, NITI stands for*
- (a) National Initiative for Transforming India
 - (b) National Institution for Transforming India
 - (c) National Institute for Technology and Innovation
 - (d) None of the above
6. *The Appropriation Bill is intended to*
- (a) reduce unnecessary expenditure on the part of the government

- (b) *give authority to government to incur expenditure from and out of the Consolidated Fund of India*
 - (c) *give authority to government to incur expenditure from the revenue receipts only*
 - (d) *be passed before the budget is taken for discussion*
7. *Public debt management aims at*
- (a) *An efficient budgetary policy to avail of domestic debt facilities*
 - (b) *Raising loans from international agencies at lower rates of interest*
 - (c) *Raising the required amount of funding at the desired risk and cost levels*
 - (d) *Management of public expenditure to reduce public debt*
8. *The railway budget is*
- (a) *Part of the general budget, but is presented by the railway minister*
 - (b) *Part of the general budget from the budget for financial year 2017-18.*
 - (c) *Part of the general budget from the budget for financial year 2021-22*
 - (d) *Part of the general budget but presented on the next day of the general budget*
9. *Outcome budgeting*
- (a) *shares information about the money allocated for various purposes in a budget*
 - (b) *establishes a direct link between budgetary allocations and performance targets measured through output and outcome indicators*
 - (c) *establishes a direct link between budgetary performance targets and public account disbursements*
 - (d) *shares information about public policies and programmes under the budget*
10. *Corporate tax*
- (a) *is collected by the union government and can be a capital receipt or revenue receipt*
 - (b) *may be collected by the respective states and fall under revenue receipts*
 - (c) *may be collected either by the centre or states and fall under revenue receipts*
 - (d) *is collected by the union government and is a revenue receipt*

11. Government borrowings from foreign governments and institutions

- (a) Capital receipt
- (b) Revenue receipt
- (c) Accounts for fiscal deficit
- (d) Any of the above depending on the purpose of borrowing

The following table relates to the revenue and expenditure figures of a hypothetical economy

In ₹ lakh Crores

(a)	Recovery of loans	5.1
(b)	Salaries of govt. servants	41.1
(c)	Capital Expenditure	45.0
(d)	Interest payments	1.3
(e)	Payments towards subsidies	3.2
(f)	Other receipts (mainly from disinvestment)	11.6
(g)	Tax revenue (net of states' share)	26.3
(h)	Non-tax revenue	12.3
(i)	Borrowings and other liabilities	6.8
(j)	States' share in tax revenue	11.9

12. The capital receipts are

- (a) 23.5
- (b) 19.7
- (c) 11.3
- (d) None of the above

13. Revenue deficit is

- (a) 23.6
- (b) 13.0
- (c) 7.0

- (d) 2.6
14. *The non-debt capital receipts of this country is*
- (a) 45.1
(b) 16.7
(c) 15.8
(d) *None of the above*
15. *A budget is said to be unbalanced when*
- (a) *when government's revenue exceeds government's expenditure*
(b) *when government's expenditure exceeds government's revenue*
(c) *either budget surplus of budget deficit occurs*
(d) *All the above*
16. *Fiscal deficit refers to*
- (a) *the excess of government's revenue expenditure over revenue receipts*
(b) *The excess of total expenditure over total receipts excluding borrowings*
(c) *Primary deficit - interest payments*
(d) *None of these*
17. *Budget of the government generally impacts*
- (a) *the resource allocation in the economy*
(b) *redistribution of income and enhance equity*
(c) *stability in the economy by measures to control price fluctuations*
(d) *all the above*
18. *Which of the following is a statement submitted along with the budget as a requirement of FRBM Act*
- (a) *Annual Financial Statement*
(b) *Macro -Economic Framework Statement*
(c) *Medium-Term Fiscal Policy cum Fiscal Policy Strategy Statement*
(d) *(b) and (c) above*
19. *Government borrowing is treated as capital receipt because*
- (a) *It is mainly used for creating assets by government*

- (b) *It creates a liability for the government*
- (c) *Both a) and b) above are correct*
- (d) *None of the above is correct*
20. *'Retail Direct 'scheme is*
- (a) *Initiated by the Reserve Bank of India*
- (b) *facilitate investment in government securities by individual investors.*
- (c) *Direct sale of goods and services by government departments*
- (d) *Both (a) and (b) are correct*
21. *Non-debt capital receipts*
- (a) *do not add to the assets of the government and therefore not treated as capital receipts*
- (b) *are those that do not create any future repayment burden for the government*
- (c) *are those that create future liabilities for the government*
- (d) *facilitate capital investments at low cost*
22. *Which of the following is a capital receipt?*
- (a) *Licence fee received*
- (b) *Sale proceeds from disinvestment*
- (c) *Assistance from Japan for covid vaccine*
- (d) *Dividend from a public sector enterprise*
23. *Grants given by the central government to state governments is*
- (a) *A revenue expenditure as it is meant to meet the current expenditure of the states*
- (b) *A revenue expenditure as it does neither creates any asset, nor reduces any liability of the government*
- (c) *A capital expenditure because it increase the capital base of the states*
- (d) *It is a grant and so does not come under revenue expenditure or capital expenditure.*

24. Short-term credit from the Reserve Bank to state governments to bridge temporary mismatches in cash flows is known as
- (a) RBI credit to states
 - (b) Commercial credit of RBI
 - (c) Ways and Means Advances (WMA)
 - (d) Short term facility

ANSWERS

1.	(c)	2	(c)	3	(b)	4.	(c)	5.	(b)	6.	(b)
7.	(c)	8.	(b)	9.	(b)	10.	(d)	11.	(a)	12.	(a)
13.	(c)	14.	(b)	15.	(d)	16.	(d)	17.	(d)	18.	(d)
19.	(b)	20.	(d)	21.	(b)	22.	(b)	23	(b)	24	(c)

UNIT – 4: FISCAL POLICY

LEARNING OUTCOMES

After studying this Chapter, you will be able to –

- define fiscal policy and list out its objectives
- explain the various instruments of fiscal policy
- describe the expansionary and contractionary fiscal policies
- elucidate the limitations fiscal policy

CHAPTER OVERVIEW



4.1 INTRODUCTION

The governments of all countries pursue numerous policies to accomplish their economic goals such as rapid economic growth, equitable distribution of wealth and income, reduction of poverty, price stability, exchange rate stability, full-employment, balanced regional development etc. Government budget is one among the most powerful instruments of economic policy. The important tools in the budgetary policy could be broadly classified into public revenue including taxation, public expenditure, public debt and finally deficit financing to bridge the gap between public receipts and payments. When all these tools are used for achieving certain goals of economic policy, public finance is transformed into what is called fiscal policy. In other words, through the use of these instruments governments intend to favourably influence the level of economic activity of a country. These, in fact, form the subject matter of fiscal policy.

Fiscal policy is the deliberate policy of the government under which it uses the instruments of taxation, public expenditure and public borrowing to influence both the pattern of economic activity and level of aggregate demand, output and employment. Fiscal policy is in the nature of a demand-side policy. An economy which is producing at full-employment level does not require government action in the form of fiscal policy.

The classical economists held the belief that the government should not intervene in the economy because the market mechanism makes the economy self-adjusting and keeps the economy at or near the natural level of real GDP at all times. Since the economy always tends to have stable prices and operates at full employment where the resources are utilized at their full capacity, and there will be no unemployment. The government should have a balanced budget and any deliberate fiscal policies are unnecessary.

The significance of fiscal policy as a strategy for achieving certain socio economic objectives was not recognized or widely acknowledged before 1930 due to the faith in the limited role of government advocated by the then prevailing laissez-faire approach. The depression resulted in very low aggregate demand along with high levels of unemployment. The classical economics could not provide any solution to this problem. In 1936, the British economist John Maynard Keynes in his book 'The General Theory of Employment, Interest, and Money' advocated increase in government spending to combat the recessionary forces in the economy and to solve the problem of unemployment. In recent times, especially after being threatened by the global financial crisis and recession, many countries have preferred to have a more active fiscal policy.

4.2 OBJECTIVES OF FISCAL POLICY

The objectives of fiscal policy, like those of other economic policies of the government, are derived from the aspirations and goals of the society. We have seen in our previous unit on market failure that it is the responsibility of the government to provide various goods and services like, highways, primary education healthcare etc to ensure social welfare.

Since nations differ in numerous aspects, the objectives of fiscal policy also may vary from country to country. However, the most common objectives of fiscal policy are:

- Achievement and maintenance of full employment,
- maintenance of price stability,
- acceleration of the rate of economic development, and
- equitable distribution of income and wealth,

The importance as well as order of priority of these objectives may vary from country to country and from time to time. For instance, while stability and equality may be the priorities of developed nations, economic growth, employment and equity may get higher priority in developing countries.

Governments may directly as well as indirectly influence the way resources are used in an economy. Fiscal policy is a powerful tool for managing the economy because of its ability to influence the total amount of output produced viz. gross domestic product. The ability of

fiscal policy to influence output by affecting aggregate demand makes it a potential instrument for stabilization of the economy. We shall now see how this happens by investigating into the fundamental equation of national income accounting that measures gross domestic product (GDP) according to expenditures.

$$\text{GDP} = C + I + G + \text{NX}$$

The right side of the equation shows the different sources of aggregate spending or demand. We know that the market demand is influenced by government actions such as tax rates and government expenditure. The governments can influence the level of economic activity (GDP) by directly controlling G (government expenditure i.e purchases of goods and services by the government) and indirectly influencing C (private consumption), I (investment), and NX (net exports or exports minus imports), through changes in taxes, transfer payments and public expenditure.

4.3 TYPES OF FISCAL POLICY

As we are aware, while pursuing fiscal policy, the government makes deliberate attempts to adjust revenues, expenditures and public debt to eliminate unemployment during recession and to achieve price stability during in inflation. Contra cyclical fiscal policy or fiscal policy measures to correct different problems created by business-cycle instability are of two basic types namely, expansionary fiscal policy and contractionary fiscal policy.

a) Expansionary Fiscal Policy

Expansionary fiscal policy is designed to stimulate the economy during the contractionary phase of a business cycle or when there is an anticipation of a business cycle contraction. A recession is said to occur when the overall economic activity declines, or in other words, when the economy 'contracts'. A 'demand-deficient' recession sets in with a period of falling real GDP, low aggregate demand and reduced consumer spending and rising unemployment. To combat such a slump in overall economic activity, the government can resort to expansionary fiscal policies. We may technically refer to this as a policy measure to close a 'recessionary gap'. How does the government achieve this?

- The government may cut all types of taxes, direct and indirect, leaving the taxpayers with extra money to spend so that there is more purchasing power and more demand for goods and services. Consequently aggregate demand, output and employment increase.
- An increase in government expenditure (discussed in detail below) will pump money into the economy and increase aggregate demand. This in turn will increase output and employment.

- A combination of increase in government spending and decrease in personal income taxes and/or business taxes

While resorting to expansionary fiscal policy, the government may run into budget deficits because tax cuts reduce government income and the government expenditures exceed tax revenues in a given year.

b) Contractionary fiscal policy

Contractionary fiscal policy is basically the opposite of expansionary fiscal policy. Contractionary fiscal policy is designed to restrain the levels of economic activity of the economy during an inflationary phase or when there is anticipation of a business-cycle expansion which is likely to induce inflation. Contractionary fiscal policy refers to the deliberate policy of government applied to curtail aggregate demand and consequently the level of economic activity. In other words, it is fiscal policy aimed at eliminating an 'inflationary gap'. In other words, if the state of the economy is such that its growth rate is extraordinarily high causing inflation and asset bubbles, contractionary fiscal policy can be used to confine it into sustainable levels.

Contractionary fiscal policy works through:

- **Decrease in government spending:** With decrease in government spending, the total amount of money available in the economy is reduced which in turn has the effect of reducing the aggregate demand.
- **Increase in personal income taxes and/or business taxes:** An increase in personal income taxes reduces disposable incomes leading to fall in consumption spending and aggregate demand. An increase in taxes on business profits reduces the surpluses available to businesses, and as a result, firms' investments shrink causing aggregate demand to fall. Increased taxes also dampen the prospects of profits of potential entrants who will respond by holding back fresh investments.
- A combination of decrease in government spending and increase in personal income taxes and/or business taxes.

Contractionary fiscal policy should ideally lead to a smaller government budget deficit or a larger budget surplus.

We have understood in general that governments influence the economy through their policies in respect of taxation, expenditure and borrowing. To sum up:

- during inflation or when there is excessive levels of utilization of resources, fiscal policy aims at controlling excessive aggregate spending, and

- during deflation or during a period of sluggish economic activity when the rate of utilization of resources is less, fiscal policy aims to compensate the deficiency in effective demand by boosting aggregate spending.

We shall now describe the application of each of the fiscal policy tools.

4.4 THE INSTRUMENTS OF FISCAL POLICY

The tools of fiscal policy are taxes, government expenditure, public debt and the government budget. We shall discuss each of them in the following paragraphs.

4.4.1 Government Expenditure as an Instrument of Fiscal Policy

Government expenditure is an important instrument of fiscal policy. Public expenditure includes governments' expenditure towards consumption, investment, and transfer payments. Government expenditure constitutes a considerable part of the total expenditure in the economy. Fiscal policy relates to decisions that determine whether the government's expenditure is more or less than what it receives. A reduction or increase in it may result in significant variations in the country's total income. As such, public expenditure can be instrumental in adjusting consumption and investment to achieve full employment.

Public expenditures are income generating and include all types of government expenditure such as capital expenditure on public works, relief expenditures, subsidy payments of various types, transfer payments and other social security benefits. Government expenditures include:

1. current expenditures to meet the day to day running of the government,
2. capital expenditures which are in the form of investments made by the government in capital equipments and infrastructure, and
3. transfer payments i.e. government spending which does not contribute to GDP because income is only transferred from one group of people to another without any direct contribution from the receivers.

Government may spend money on performance of its large and ever-growing functions and also for deliberately bringing in stabilization.

During a recession, it may initiate a fresh wave of public works, such as construction of roads, irrigation facilities, sanitary works, ports, electrification of new areas etc. Government expenditure involves employment of labour as well as purchase of multitude of goods and services. These expenditures directly generate incomes to labour and suppliers of materials and services. Apart from the direct effect, there is also indirect effect in the form of working of multiplier. The incomes generated are spent on purchase of consumer goods. The extent

of spending by people depends on their marginal propensity to consume (MPC). There is generally surplus capacity in consumer goods industries during recession and an increase in demand for various goods leads to expansion in production in those industries as well.

A relevant question here is; from where will the government find resources to increase its expenditure? We know that if government resorts to increase in taxes, it is self-defeating as increased taxes will reduce the disposable incomes and therefore aggregate demand. The government should in such cases go for a deficit budget which may be financed either through borrowing or through monetization (creation of additional money to finance expenditure). The former runs the risk of crowding out private spending.

Additionally, a programme of public investment will strengthen the general confidence of businessmen and consequently their willingness to invest. Primary employment in public works programmes will induce secondary and tertiary employment, and before long the economy is put on an expansion track.

Public expenditure is also used as a policy instrument to reduce the severity of inflation and to bring down the prices. This is done by reducing government expenditure when there is a fear of inflationary rise in prices. Reduced incomes on account of decreased public spending help eliminate excess aggregate demand.

4.4.2 Taxes as an Instrument of Fiscal Policy

Taxes form the most important source of revenue for governments. Taxation policies are effectively used for establishing stability in an economy. Tax as an instrument of fiscal policy consists of changes in government revenues or in rates of taxes aimed at encouraging or restricting private expenditures on consumption and investment. Taxes determine the size of disposable income in the hands of the general public which in turn determines aggregate demand and possible inflationary and deflationary gaps. The structure of tax rates is varied in the context of the overall economic conditions prevailing in an economy.

During recession and depression, the tax policy is framed to encourage private consumption and investment. A general reduction in income taxes leaves higher disposable incomes with people inducing higher consumption. Low corporate taxes increase the prospects of profits for business and promote further investment. The extent of tax reduction and /or increase in government spending required depends on the size of the recessionary gap and the magnitude of the multiplier.

During inflation, new taxes can be levied and the rates of existing taxes are raised to reduce disposable incomes and to wipe off the surplus purchasing power. However, excessive taxation usually stifles new investments and therefore the government has to be cautious about a policy of tax increase.

4.4.3 Public Debt as an Instrument of Fiscal Policy

A rational policy of public borrowing and debt repayment is a potent weapon to fight inflation and deflation. Public debt may be internal or external; when the government borrows from its own people in the country, it is called internal debt. On the other hand, when the government borrows from outside sources, the debt is called external debt. Public debt takes two forms namely, market loans and small savings.

In the case of market loans, the government issues treasury bills and government securities of varying denominations and duration which are traded in debt markets. For financing capital projects, long-term capital bonds are floated and for meeting short-term government expenditure, treasury bills are issued.

The small savings represent public borrowings, which are not negotiable and are not bought and sold in the market. In India, various types of schemes are introduced for mobilising small savings e.g., National Savings Certificates, National Development Certificates, etc. Borrowing from the public through the sale of bonds and securities curtails the aggregate demand in the economy. Repayments of debt by governments increase the availability of money in the economy and increase aggregate demand.

4.4.4 Budget as an Instrument of Fiscal Policy

Government's budget is widely used as a policy tool to stimulate or contract aggregate demand as required. The budget is simply a statement of revenues earned from taxes and other sources and expenditures made by a nation's government in a year. The net effect of a budget on aggregate demand depends on the government's budget balance.

A government's budget can either be balanced, surplus or deficit.

- A balanced budget results when expenditures in a year equal its tax revenues for that year. Such a budget will have no net effect on aggregate demand since the leakages from the system in the form of taxes collected are equal to the injections in the form of expenditures made.
- A budget surplus that occurs when the government collects more than what it spends, though sounds like a highly attractive one, has in fact a negative net effect on aggregate demand since leakages exceed injections.
- A budget deficit wherein the government expenditure in a year is greater than the tax revenue it collects has a positive net effect on aggregate demand since total injections exceed leakages from the system.

While a budget surplus reduces national debt, a budget deficit will add to the national debt. Deliberate changes to the composition of revenue and expenditure components of the budget

are extensively used to change macro economic variables such as level of economic growth, inflation, unemployment and external stability.

4.4.5 Fiscal Policy for Long-run Economic Growth

We have been discussing so far about how fiscal policy acts as an effective tool for managing aggregate demand in the short-run to help maintain price stability and employment levels. However, we know that economic growth is indispensable for sustainable development and favourable social outcomes. The demand-side fiscal policies unaccompanied by policies to stimulate aggregate supply cannot produce long-run economic growth.

Fiscal policy influence economic growth through its effects on the incentives faced by individuals and firms. For example;

- Fiscal policies such as those involving infrastructure spending generally have positive supply-side effects. When government supports building a modern infrastructure, the private sector is provided with the requisite overheads it needs.
- Government provision of public goods such as education, healthcare, nutrition, research and development etc. provide momentum for long-run economic growth through human capital formation. Increase in human capital makes physical capital more productive.
- Taxes can have either positive or negative impact on economic growth depending on whether it encourages or discourages saving and investment.
- A well designed tax policy that rewards innovation and entrepreneurship, without discouraging incentives will promote private businesses who wish to invest and thereby help the economy grow. For example, an increase in corporate taxes to raise extra revenue may have adverse consequences on incentives and output.
- Tax and spending policies (e.g. subsidies) can be effectively used to correct market failures resulting from externalities.
- Increase in environment taxes increase the cost of firms and reduce their output
- Subsidies on inputs and support prices to producers (e.g. farmers) generate higher output.

4.4.6 Fiscal Policy for Reduction in Inequalities of Income and Wealth

Many developed and developing economies are facing the challenge of rising inequality in incomes and opportunities. Fiscal policy is a chief instrument available for governments to influence income distribution and plays a significant role in reducing inequality and achieving

equity and social justice. Generally, the policy makers in developing countries try to address socioeconomic issues such as illiteracy, poverty, unemployment, and inequality by deliberately changing the tax rates and tax structure and the levels and direction of public spending.

Government revenues and expenditure have traditionally been regarded as important instruments for carrying out desired redistribution of income. The distribution of income in the society is influenced by fiscal policy both directly and indirectly. We shall see a few such measures as to how each of these can be manipulated to achieve desired distributional effects.

- A progressive direct tax system ensures that those who have greater ability to pay contribute more towards defraying the expenses of government and that the tax burden is distributed fairly among the population.
- Indirect taxes can be differential: for example, the commodities which are primarily consumed by the richer income group, such as luxuries, are taxed heavily and the commodities the expenditure on which forms a larger proportion of the income of the lower income group, such as necessities, are taxed light or not taxed at all.
- A carefully planned policy of public expenditure helps in redistributing income from the rich to the poorer sections of the society. This is done through spending programmes targeted at welfare measures for the disadvantaged, such as
 - (i) poverty alleviation programmes
 - (ii) free or subsidized medical care, education, housing, essential commodities etc. to improve the quality of living of the poor
 - (iii) infrastructure provision on a selective basis (e.g. rural roads, water supply for tribal area)
 - (iv) various social security schemes under which people are entitled to old-age pensions, unemployment relief, sickness allowance etc.
 - (v) subsidized production of products of mass consumption
 - (vi) public production and/ or grant of subsidies to ensure sufficient supply of essential goods, and
 - (vii) strengthening of human capital for enhancing employability etc.

Choice of a progressive tax system with high marginal taxes may act as a strong deterrent to work save and invest. Therefore, the tax structure has to be carefully framed to mitigate possible adverse impacts on production and efficiency. Additionally, a highly redistributive fiscal policy with excessively generous social programs can reduce incentives to work and save.

4.4.7 Limitations of Fiscal Policy

We have seen above that fiscal policy is the conscious manipulation of government spending and taxes to influence the economy. However, there are some significant limitations in respect of choice and implementation of fiscal policy.

- ◆ One of the biggest problems with using planned fiscal policy to counteract fluctuations is the different types of lags involved in fiscal-policy action. There are significant lags namely:
 - Recognition lag: The economy is a complex phenomenon and the state of the macro economic variables is usually not easily comprehensible. There is difficulty in collecting accurate and timely data. There may be delay on the part of the government to recognize the need for a policy change.
 - Decision lag: Once the need for intervention is recognized, the government has to evaluate the possible alternative policies. Delays are likely to occur to make a decision on the most appropriate policy.
 - Implementation lag: even when appropriate policy measures are decided on, there are possible delays in bringing in legislation and implementing them on account of bureaucracy. This is specially so under a democratic set up.
 - Impact lag: impact lag occurs when the outcomes of a policy are not visible for some time.
- ◆ Fiscal policy changes may at times be badly timed due to the various lags so that it is highly possible that an expansionary policy is initiated when the economy is already on a path of recovery and vice versa.
- ◆ There are difficulties in instantly changing governments' spending and taxation policies.
- ◆ It is practically difficult to reduce government spending on various items such as defence and social security as well as on huge capital projects which are already midway.
- ◆ Public works cannot be adjusted easily along with movements of the trade cycle because many huge projects such as highways and dams have long gestation period. Besides, some urgent public projects cannot be postponed for reasons of expenditure cut to correct fluctuations caused by business cycles.
- ◆ Supply-side economists are of the opinion that certain fiscal measures will cause disincentives. For example, increase in profits tax may adversely affect the incentives of firms to invest and an increase in social security benefits may adversely affect incentives to work and save.

- ◆ Deficit financing increases the purchasing power people. The production of goods and services, especially in under developed countries may not catch up simultaneously to meet the increased demand. This will result in prices spiraling beyond control.
- ◆ Increase in government borrowing creates perpetual burden on even future generations as debts have to be repaid. If the economy lags behind in productive utilization of borrowed money, sufficient surpluses will not be generated for servicing debts. External debt burden has been a constant problem for India and many developing countries.
- ◆ If governments compete with the private sector to borrow money for spending, it is likely that interest rates will go up, and firms' willingness to invest may be reduced. Individuals too may be reluctant to borrow and spend and the desired increase in aggregate demand may not be realized. This phenomenon is described below.

4.4.8 Crowding Out

We shall now discuss the secondary effects that fiscal policy may have on the economy. Some economists are of the opinion that government spending would sometimes substitute private spending and when this happens the impact of government spending on aggregate demand would be smaller than what it should be. In such cases, fiscal policy may become ineffective.

When government aims to solve the problem of recession with an expansionary fiscal policy, it will resort to increase in spending and/or a reduction in taxes. The government runs a budget deficit as income decreases and expenditure increases. The budget deficit, which is the difference between government expenditures and tax revenues, is financed by government borrowing from the credit market. The government adds to national debt by issuing long-term, interest-bearing bonds and uses the proceeds to finance the deficit.

Substantial government borrowing in the credit market tends to reduce the amount of funds available and pushes the interest rates up. Higher interest rates slow down business investment expenditures and consumption expenditures that are sensitive to interest rates. An increase in the size of government spending during recessions will 'crowd-out' private spending in an economy. In other words, when spending by government in an economy replaces private spending, the latter is said to be crowded out. As a result, the effectiveness of expansionary fiscal policy in stimulating aggregate demand will be diminished to a great extent. This may also possibly reduce the economy's prospects of long-run economic growth.

However, during deep recessions, crowding-out is less likely to happen as private sector investment is already minimal and therefore there is only insignificant private spending to crowd out. Moreover, during a recession phase the government would be able to borrow from the market without increasing interest rates.

4.4.9 Conclusion

Well designed and timely fiscal responses are necessary for an economy which is going through stages of recession or inflation or on a drive to achieve economic growth and/ or equitable distribution of income. During periods of recession when there are idle productive capacity and unemployed workers, an increase in aggregate demand will generally bring about an increase in total output without changing the level of prices. On the contrary, if an economy is functioning at full employment, an expansionary fiscal policy will exert pressure on prices to go up and will have no impact on total output. Fiscal policy is also a potent instrument for bringing in economic growth and equality in distribution of income.

SUMMARY

- ◆ Fiscal policy involves the deliberate use of government spending, taxation and borrowing to influence both the pattern of economic activity and level of growth of aggregate demand, output and employment.
- ◆ Laissez-faire approach advocated limited role of government resulting in non recognition of the significance of fiscal policy as a strategy for achieving certain socio economic objectives till 1930.
- ◆ Through the use budgetary instruments such as public revenue, public expenditure, public debt and deficit financing, governments intend to favourably influence the level of economic activity of a country.
- ◆ The objectives of fiscal policy may vary from country to country, but generally they are: achievement and maintenance of full employment, maintenance of price stability, acceleration of the rate of economic development and equitable distribution of income and wealth.
- ◆ Since $GDP = C + I + G + NX$, governments can influence economic activity (GDP), by controlling G directly and influencing C, I, and NX indirectly, through changes in taxes, transfer payments and expenditure.
- ◆ The Keynesian school is of the opinion that fiscal policy can have very powerful effects in altering aggregate demand, employment and output in an economy when the economy is operating at less than full employment levels and when there is a need to offer a stimulus to demand.
- ◆ The tools of fiscal policy are taxes, government expenditure, public debt and the budget.
- ◆ Expansionary fiscal policy is designed to stimulate the economy during the contractionary phase of a business cycle and is accomplished by increasing aggregate

expenditures and aggregate demand through an increase in all types of government spending and / or a decrease in taxes.

- ◆ Contractionary fiscal policy is designed to restrain the levels of economic activity of the economy during an inflationary phase by decreasing the aggregate expenditures and aggregate demand through a decrease in all types of government spending and/ or an increase in taxes.
- ◆ A recession sets in with a period of declining real income, as measured by real GDP and a situation of rising unemployment.
- ◆ A recessionary gap, also known as a contractionary gap, is said to exist if the existing levels of aggregate production is less than what would be produced with the full employment of resources.
- ◆ Government expenditure, an important instrument of fiscal policy, generates incomes and also has indirect effect in the form of working of multiplier.
- ◆ Taxes determine the size of disposable income in the hands of general public which in turn determines aggregate demand and possible inflationary and deflationary gaps.
- ◆ During recession and depression, the tax policy is framed to encourage private consumption and investment. A general reduction in income taxes and lower corporate taxes increase aggregate demand and investments respectively.
- ◆ During inflation new taxes can be levied and the rates of existing taxes may be raised to reduce disposable incomes and to wipe off the surplus purchasing power.
- ◆ Borrowing from the public through the sale of bonds and securities curtails the money available for spending which in turn reduces the aggregate demand in the economy. Repayment of debts increases the availability of money in the economy and increase aggregate demand.
- ◆ Budget is widely used as a policy tool to stimulate or to contract aggregate demand as required.
- ◆ Fiscal Policy also aims to attain long-run economic growth through policies to stimulate aggregate supply.
- ◆ Fiscal policy is a chief instrument available for governments to influence income distribution and plays a significant role in reducing inequality and achieving equity and social justice.
- ◆ Contractionary fiscal policy is aimed at eliminating inflationary gaps and to trim down the aggregate demand by decrease in government spending and an increase in

personal income taxes and/or business taxes causing less disposable incomes and lower incentives to invest.

- ◆ Fiscal policy suffers from limitations such as limitations in respect of choice of appropriate policy, recognition lag, decision lag, implementation lag, impact lag, inappropriate timing, difficulties of forecasting due to uncertainties, possible conflicts between different objectives, possibility of generating disincentives, practical difficulty to reduce government expenditures and the possibility of certain fiscal measures replacing private spending.
- ◆ An increase in the size of government spending during recessions will 'crowd-out' private spending in an economy. In other words, when spending by government in an economy replaces private spending, the latter is said to be crowded out.
- ◆ As a result of crowding out, the effectiveness of expansionary fiscal policy in stimulating aggregate demand will be diminished to a great extent. This may also possibly reduce the economy's prospects of long-run economic growth.
- ◆ During deep recessions, crowding-out is less likely to happen as private sector investment is already minimal and therefore there is only insignificant private spending to crowd out.

TEST YOUR KNOWLEDGE

Multiple Choice Questions

1. *Fiscal policy refers to the*
 - (a) *use of government spending, taxation and borrowing to influence the level of economic activity*
 - (b) *government activities related to use of government spending for supply of essential goods*
 - (c) *use of government spending, taxation and borrowing for reducing the fiscal deficits*
 - (d) *and (b) above*
2. *If real GDP is continuously declining and the rate of unemployment in the economy is increasing, the appropriate policy should be to*
 - (a) *Increase taxes and decrease government spending*
 - (b) *Decrease both taxes and government spending*

- (c) *Decrease taxes and increase government spending*
 - (d) *Either (a) or (c)*
3. *Which of the following are likely to occur when an economy is in an expansionary phase of a business cycle?*
- (A) *Rising unemployment rate*
 - (B) *Falling unemployment rate*
 - (C) *Rising inflation rate*
 - (D) *Deflation*
 - (E) *Falling or stagnant wage for workers*
 - (F) *Increasing tax revenue*
 - (G) *Falling tax revenue*
- (a) *A, B and F are most likely to occur*
 - (b) *B, C and F are most likely to occur*
 - (c) *D, E and F are most likely to occur*
 - (d) *A, E and G are most likely to occur*
4. *During recession the fiscal policy of the government should be directed towards*
- (a) *Increasing the taxes and reducing the aggregate demand*
 - (b) *Decreasing taxes to ensure higher disposable income*
 - (c) *Increasing government expenditure and increasing taxes*
 - (d) *None of the above*
5. *According to Keynesian economics, when we have inflation an effective fiscal policy should not include*
- (a) *increase corporate taxes.*
 - (b) *decrease aggregate demand.*
 - (c) *Increase government purchases.*
 - (d) *None of the above is correct*
6. *Keynesian economists believe that*
- (a) *fiscal policy can have very powerful effects in altering aggregate demand, employment and output in an economy*

- (b) *when the economy is operating at less than full employment levels and when there is a need to offer stimulus to demand fiscal policy is of great use*
 - (c) *Wages are flexible and therefore business fluctuations would be automatically adjusted*
 - (d) *(a) and (b) above*
7. *Which of the following may ensure a decrease in aggregate demand during inflation?*
- (a) *decrease in all types of government spending and/ or an increase in taxes*
 - (b) *increase in government spending and/ or a decrease in taxes*
 - (c) *decrease in government spending and/ or a decrease in taxes*
 - (d) *All the above*
8. *A recession is characterized by*
- (a) *Declining prices and rising employment*
 - (b) *Declining unemployment and rising prices*
 - (c) *Declining real income and rising unemployment.*
 - (d) *Rising real income and rising prices*
9. *Which one of the following is an example of fiscal policy?*
- (a) *A tax cut aimed at increasing the disposable income and spending*
 - (b) *A reduction in government expenditure to contain inflation*
 - (c) *An increase in taxes and decrease in government expenditure to control inflation*
 - (d) *All the above*
10. *Which of the following would illustrate a recognition lag?*
- (a) *The time required to identify the appropriate policy*
 - (b) *The time required to identify to pass a legislation*
 - (c) *The time required to identify the need for a policy change*
 - (d) *The time required to establish the outcomes of fiscal policy*
11. *An expansionary fiscal policy, taking everything else constant, would in the short-run have the effect of*
- (a) *a relative large increase in GDP and a smaller increase in price*
 - (b) *a relative large increase in price, a relatively smaller increase in GDP*

- (c) both GDP and price will be increasing in the same proportion
- (d) both GDP and price will be increasing in a smaller proportion
12. Which statement (s) is (are) correct about crowding out?
- I. A decline in private spending may be partially or completely offset by the expansion of demand resulting from an increase in government expenditure.
- II. Crowding out effect is the negative effect fiscal policy may generate when money from the private sector is 'crowded out' to the public sector.
- III. When spending by government in an economy increases government spending would be crowded out.
- IV. Private investments, especially the ones which are interest –sensitive, will be reduced if interest rates rise due to increased spending by government
- (a) I and III only
- (b) I, II, and III
- (c) I, II, and IV
- (d) III only
13. Which of the following policies is likely to shift an economy's aggregate demand curve to the right?
- (a) Increase in government spending
- (b) Decrease in taxes
- (c) A tax cut along with increase in public expenditure
- (d) All the above
14. Identify the incorrect statement
- (a) A progressive direct tax system ensures economic growth with stability because it distributes the burden of taxes unequally
- (b) A carefully planned policy of public expenditure helps in redistributing income from the rich to the poorer sections of the society.
- (c) There are possible conflicts between different objectives of fiscal policy such that a policy designed to achieve one goal may adversely affect another
- (d) An increase in the size of government spending during recessions may possibly 'crowd-out' private spending in an economy.

15. Read the following statements
- I. Fiscal policy is said to be contractionary when revenue is higher than spending i.e., the government budget is in surplus
 - II. Other things constant, a fiscal expansion will raise interest rates and "crowd out" some private investment
 - III. During inflation new taxes can be levied and the rates of existing taxes are raised to reduce disposable incomes
 - IV. Classical economists advocated contractionary fiscal policy to solve the problem of inflation
- Of the above statements
- (a) I and II are correct
 - (b) I, II and III are correct
 - (c) Only III is correct
 - (d) All are correct
16. While resorting to expansionary fiscal policy
- (a) the government may possibly have a budget surplus as increased expenditure will bring more output and more tax revenue
 - (b) the government may run into budget deficits because tax cuts reduce government income and the government expenditures exceed tax revenues in a given year
 - (c) it is important to have a balanced budget to avoid inflation and bring in stability
 - (d) None of the above will happen
17. Contractionary fiscal policy
- (a) is resorted to when government expenditure is greater than tax revenues of any particular year
 - (b) increase the aggregate demand to sustain the economy
 - (c) to increase the disposable income of people through tax cuts and to enable greater demand
 - (d) is designed to restrain the levels of economic activity of the economy during an inflationary phase
18. When government spending is deliberately reduced to bring in stability
- (a) the government is resorting to contractionary fiscal policy

- (b) *the government is resorting to expansionary fiscal policy*
 - (c) *trying to limit aggregate demand to sustainable levels*
 - (d) *(a) and c) above*
19. *An increase in personal income taxes*
- (a) *reduces disposable incomes leading to fall in consumption spending and aggregate demand*
 - (b) *is desirable during inflation or when there is excessive levels of aggregate demand*
 - (c) *is to compensate the deficiency in effective demand by boosting aggregate spending*
 - (d) *both a) and b) are correct*
20. *While the government resorts to deliberate fiscal policy it may not attempt to manipulate*
- (a) *Government expenditures on public works*
 - (b) *The rates of personal income taxes and corporate taxes*
 - (c) *Government expenditures on goods and services purchased by government*
 - (d) *The rate of interest prevailing in the economy*
21. *Which of the following fiscal remedy would you advice when an economy is facing recession*
- (a) *the government may cut interest rates to encourage consumption and investment*
 - (b) *the government may cut taxes to increase aggregate demand*
 - (c) *the government may follow a policy of balanced the budget.*
 - (d) *None of the above will work*
22. *While if governments compete with the private sector to borrow money for securing resources for expansionary fiscal policy*
- (a) *it is likely that interest rates will go up and firms may not be willing to invest*
 - (b) *it is likely that interest rates will go up and the individuals too may be reluctant to borrow and spend*
 - (c) *it is likely that interest rates will go up and the desired increase in aggregate demand may not be realized*
 - (d) *All the above are possible.*

ANSWERS

1.	(a)	2	(c)	3	(b)	4.	(b)	5.	(c)	6.	(d)
7.	(a)	8.	(c)	9.	(d)	10.	(c)	11.	(a)	12.	(c)
13.	(d)	14.	(a)	15.	(b)	16.	(b)	17.	(d)	18.	(d)
19.	(d)	20.	(d)	21.	(b)	22.	(d)				

