
**BLOCK 4 POLITICAL INSTITUTIONS AND
FUNCTIONING OF THE STATE**

THE PEOPLE'S
UNIVERSITY

BLOCK 4 INTRODUCTION

Institution and Democracy

The final block of the course is titled **Political Institutions and Functioning of the State**. In the first block, you had studied about the basic idea of what is meant by economic growth and economic development and the relationship among them. Also you were acquainted with comparisons among nations. The second block familiarized you with growth models and with the factors that determine growth. The third block discussed the important issues of inequality and poverty.

The present block has three units. The first unit of the block, unit 10, is titled **Institutions and Evolution of Democracy**. The unit discusses alternative institutional trajectories and their relationship with economic performance. The unit also discusses within-country differences in the functioning of the State institutions and the relationship between democracy and development. The title of the next unit, unit 11 is **Theories of Regulation**. This unit discusses the concept of economic regulation and examines the arguments for regulation. It also describes two broad theories that explain and discuss economic regulation. Finally the unit shows how sometimes the economic organizations or firms that are being regulated, themselves capture the regulatory process and get benefits from the regulation process. The final unit of the block, which is the final unit of this course, unit 12 is titled **Government Failure and Corruption**. The unit examines the role of state in the economy, particularly the economy of a developing nation, in response to market failure, and also to perform certain roles that may be particularly required for developing nations. The unit also discusses how in certain situations the government may 'fail' in terms of creating outcomes where economic efficiency is reduced. Finally the unit discusses a problem that plagues the institutional and government functioning in several developing nations, namely, corruption.

UNIT 10 INSTITUTIONS AND DEMOCRACY*

Structure

10.0 Objectives

10.1 Introduction

10.2 Institutions and Evolution of Democracy

10.3 Alternative Institutional Trajectories

10.3.1 External Government Institution

10.3.2 Private Property Rights

10.3.3 Community Institution

10.4 Functions and Pre-requisites of an Institutions

10.5 Institutional Trajectories and Economic Performance

10.5.1 Institutions in India and Economic Growth

10.6 Let Us Sum Up

10.7 Answers/Hints to Check Your Progress Exercises

10.0 OBJECTIVES

After going through this Unit, you should be able to:

- Explain the evolution of institutions and democracy;
- Discuss the alternative institutional trajectories;
- Identify the pre-requisites of a sound institution;
- Discuss the functions of an institution; and
- Explain the role of institutions in economic growth of a country

10.1 INTRODUCTION

The institutional infrastructure is not constructed overnight. It is a far complex task. It remains in formal and informal manner in a given society. The culture and the moral fibre of the individuals influence the outcome of an institution in a country. We begin this unit by explaining the situations which demand the existence of an institution, the need for institutions and how individuals and an institution are related. Afterwards, we learn about the alternative institutional trajectories in terms of state institutions, private property rights and community-based institutions. To understand about an institution, it is imperative to learn about the objectives, functions or pre-requisites for a sound institution. In the

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latter half of the unit we discuss the relationship of institutions and economic development of a country with brief reference to the reforms in India.

10.2 INSTITUTIONS AND EVOLUTION OF DEMOCRACY

The common perspective views institutions as rules. This perspective also stresses that the new institutions represent and reflect the interests and reasoning of economic or political agents. The perspective generally remains that one exogenous set of institutions to explain subsequent ones. As per Douglass North (1990, p. 3), Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction. Let us look at the evolution of institutionalism which emphasizes the importance of environmental forces.

The popular and commonly observed phenomenon known as *Tragedy of commons* was not first noticed by Hardin. Aristotle observed it a long time ago that each individual thinks mainly of his own and not at all about the common interest. The least care is given to the factors or resources which are common to the greatest number of individuals. This leads to situations of conflict and men land up fighting with each other as their primary objective remains to seek their own good.

Another phenomenon observed is the *Prisoner's Dilemma*. It challenges a fundamental faith that rational human beings can achieve rational results. This challenge is largely due to the paradox that in a game of prisoner's dilemma all the individuals choose rational strategies (individually) but those strategies are no good for a collective outcome because the collective outcome turns out to be irrational. In the game of Prisoner's Dilemma, the players have complete information and communication among the players is impossible or irrelevant as it is not included in the model of this game. The verbal agreements, if any, are generally non-binding.

Some believe in the *logic of collective action*. To govern the natural resources which are used by many individuals, the state control is recommended. This can be easily observed in many scholarly articles about "tragedy of commons". These recommendations are mainly in order to prevent destruction of the natural resources. But there are many who suggest privatising these resources to resolve the problem of common use of these resources. Both the regimes have their own pros and cons. It is not easy to enable the individuals to sustain long-term, productive use of natural resource systems. In the past, many communities of individuals have trusted on institutions which do not resemble to the state or to the market, in order to govern some resource systems. This regime has shown reasonable degrees of success over long periods of time.

The goods which are commons like the natural resources allow the benefits to all and exclusion is not possible. Further, it does not provide any incentive to the individuals to contribute towards the provision of such goods. The logic here is

that the individuals are rational and display self-interested behaviour, hence the group of such individuals should also display the same but the outcome of group behaviour is chaos or destruction.

The tragedy of the commons, the prisoner's dilemma, and the logic of collective action are closely related concepts. A common problem which all these three models face is the *free rider problem*. As mentioned earlier, the natural resources are such in nature that individuals cannot be excluded from receiving their benefits. This leads to an incentive for not paying for receiving such benefits and to just free ride on the efforts/payments made by others. Eventually, we reach to a possibility where all choose to free ride and the benefit in question cease to exist.

There are many factors to consider while devising an institution in order to manage the common resources. Design principles of the institutions, reasons of continued incentive for participation in terms of effort in the governance and management of the such resources, internal and external factors that hinder or improve the individual capabilities. The whole exercise of organising the collective action must address a common set of problems. This set includes problems like coping with free-riding, solving commitment problems and monitoring individual compliance with sets of rules. Solving such problems contribute to an understanding of how individuals address these crucial problems in some other settings as well. Different behaviour pattern affects the way alternatives are perceived and weighed. Generally, those actions are not included in the set of strategies to be considered for policy formulation or institutions which are considered wrong among a set of individuals interacting together over time.

These three models discussed above and their many variants are diverse representations of a broader and still-evolving theory of collective action. Many policies are formulated on the basis of these models but the use of the models have been eventually only a metaphorical use. Much more work will be needed to develop the theory of collective action into a reliable and useful foundation for policy analysis.

The word 'democracy' originally comes from the Greek language. It is made of two words: 'demos' meaning whole citizen living within a particular city-state and 'kratos' meaning power or rule. It is generally agreed that liberal democracies are based on four main principles:

- A belief in the individual: since the individual is believed to be both moral and rational;
- A belief in reason and progress: based on the belief that growth and development is the natural condition of mankind and politics the art of compromise;
- A belief in a society that is consensual: based on a desire for order and co-operation not disorder and conflict;

- A belief in shared power: based on a suspicion of concentrated power (whether by individuals, groups or governments).

The institutions which we discuss in this unit are based on more than one principle of democracy mentioned above.

10.3 ALTERNATIVE INSTITUTIONAL TRAJECTORIES

The existing literature indicates there are many ways to organise such activities with the help of institutions and policies. In *Leviathan* (1651), Hobbes says that there is one alternative to solve the problem of the commons dilemma. He says either there has to be a private enterprise system or socialism. If the ruin or chaos is to be avoided in a crowded world then the people must be responsive to a coercive force outside their individual psyches. Such a force is termed as a 'Leviathan' by Hobbes.

10.3.1 External Government Institution

The presumption that external Leviathan is necessary to avoid tragedies of the commons, leads to suggestions that central governments control most natural resource systems. The absolute power of the sovereign was ultimately justified by the consent of the governed, who agreed, in a hypothetical social contract, to obey the sovereign in all matters in exchange for a guarantee of peace and security. Some believe that "iron governments," perhaps military governments, would be necessary to achieve control over ecological problems. In other words, if private interests cannot be expected to protect the public domain, then external regulation by public agencies, governments, or international authorities is needed. In case of having an external government agency, the specific herding strategy considered best as per the available commons, will be decided by the central authority. This authority will also decide who uses the commons, when they use it and how many animals can be grazed (in case of common meadows). But this centralised government agency can only achieve optimal efficient equilibrium if it accurately measures the capacity of a common pool resource, assigns this capacity unambiguously, monitors actions regularly, and takes strict actions against noncompliance. Beyond this, an important factor to consider is the cost of creating and maintaining such an agency, which hardly is given a thought. To achieve optimal equilibrium, the centralised agency needs to work very hard and it is easy to not have enough information on which is based the achievement of optimal equilibrium. Suppose the government does not have accurate information about the availability of commons up for use. In that case the agency will land up making errors in formulating the blueprint of the use of that common. The implications of incomplete information can be highly impacting. So, we can say that it is difficult for a central authority to have sufficient time-and-place information to estimate accurately both the carrying capacity of a common and the appropriate fines to induce cooperative behaviour.

10.3.2 Private Property Rights

The other group of policy analysts is also influenced with the same three models we discussed earlier but they believe in clearly defining the private property rights over the resources owned in common by all. The group suggests that the central authority should give out ownership rights to the resource first and then allow individuals to pursue their own self-interests within a set of well-defined property rights. They say that the establishment of full property rights is necessary to avoid the inefficiency of overuse of the commons. If one has right over the resource then the buying/selling of the resource will take place as per the terms prevailing in the market. The prices will be reached at by the forces of demand and supply of that resource. But it is common knowledge that the markets for private goods also do not function efficiently at times. The equilibrium prices at times do not signal the true scarcity of the resource. Welfare loss may occur for some while some may benefit. Moreover, there is no one rule in order to decide who gets the property rights.

10.3.3 Community Institution

We have noticed that some experts have oversimplified the issue at hand. They believe that only state-established institutional arrangements could sustain the common resources in the long run i.e., centralized government and private property right (discussed in section 10.2). Further they believe that the individuals who use these resources are trapped in a commons dilemma and hence cannot provide any solutions on their own. These experts have missed what we have mentioned in the earlier section that many communities and social groups have been successfully able to manage the commons against the threats like resource degradation. They are able to do so by developing and maintaining self-governing institutions.

Human has been observed to affect natural resources of a nation and human institutions affect the resilience of the environment. Locally evolved institutional arrangements governed by stable communities and buffered from outside forces have sustained resources successfully for centuries. Such community-based institutions often fail as well when rapid change occurs. It is difficult to manage the ideal conditions which are needed for successful governance. Significant problems exist like trans-boundary pollution, tropical deforestation, and climate change. These problems are at larger scale and local communities are not successful in addressing them. A major challenge faced by the policy makers is in terms of developing theories about human organisation which should be able to deal with variety of situations (like tragedy of commons) and assess the human capabilities and limitations on a realistic scale.

There is one similarity in the views of both centralization advocates and privatization advocates. They both accept that institutional change must come from outside and be imposed on the individuals affected. Despite the common view on the relevance of existence of the central authority, the institutional changes they recommend could hardly be unrelated. Let us see how. If we look at a competitive market which is made up of private institutions/players, we notice that any individual producer can enter or exit the market at any time without thinking about the cost of the existence of that market or of maintaining the market, because the market simply exists for that producer. In a manner this competitive market is like a public good. Any given market needs the support of the public institutions in order to exist. In reality, the public and private institutions are inter-dependent and do not exist in isolation.

Check Your Progress 1

- 1) List the four liberal principles of Democracy.

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- 2) Explain the concept of tragedy of commons and the Prisoners' dilemma.

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- 3) List any four factors which should be considered while devising an institution.

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- 4) Discuss any two institutional trajectories.

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- 5) What alternative has been suggested by Hobbes to solve the commons dilemma?

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10.4 FUNCTIONS AND PRE-REQUISITES OF AN INSTITUTION

The locally formed institutions as well as the state formed institutions have failed in the past due to various factors. Past data testing in different models of institution formation ideally should provide the policies and institutions which generate far less conflict than the earlier models. Having proper information about the human capabilities as well as the common resource is one of the factors which helps the institution run successfully. But this is not easy. Finding ways to measure and monitor the outcomes for such varied values is a major informational challenge for governance. Following factors are important and to be dealt with in order to have a successful institution formation.

One may ask how effective commons governance can be made easier to achieve. Let us look at some factors which makes it easier to organise the collective action;

- (i) the resources and use of the resources by humans can be monitored. The information on the use of commons can be verified and understood at relatively low cost (e.g., trees are easier to monitor than fish).
- (ii) There are moderate rates of change in resources, resource-user populations, technology, and economic and social conditions.
- (iii) dense social network in the communities (social capital), maintain frequent face-to-face communication. This increases the potential for trust among the communities and allow people to express and hence lowers the cost of monitoring behaviour and prepares conducive environment for rule compliance.
- (iv) Easy and low-cost exclusion of the outsiders from using the resource, whenever necessary.
- (v) intention of the users to support effective monitoring and rule enforcement.

Few settings in the world are characterized by all of these conditions. The challenge is to devise institutional arrangements that help to establish such conditions. In other words, the institutional model should be able to meet the main challenges of governance in the absence of ideal conditions. Some of the challenges are:

1. *Dealing with conflict*: It is very common to observe conflicts due to the difference in power and values among different interested parties, in the matters related to environmental choices. Dealing with such conflicts is as important as the concern about resource itself. Conflict resolution is a major motivation for designing resource institutions.
2. *Inducing rule compliance*: an institution will lead to effective governance only if the rules of resource use are adhered to and the violations are modest. It is not generally recommended to penalise the first-time offenders in a severe manner. It has been noticed that it is most effective to impose modest sanctions on first-time offenders. The gradual increase in the severity of sanctions shall take place for those who do not learn from their first or second offense penalty.
3. *Providing infrastructure*: When we discuss about institutions, mainly our focus is on different ways to institutionalise. But simultaneously the physical and technological infrastructure is too important to ignore. Infrastructure and the level of technology advancement determines the degree to which a commons can be exploited (e.g., fishing technology). Technology determines the extent to which waste can be reduced in resource use, and the degree to which resource conditions and the behaviour of users can be effectively monitored.
4. *Be prepared for change*: There are many features which are likely to change in the setting of commons and their use. The institutions formulated should be able to show some flexibility in case they need to adapt as per changing conditions. Changes may take place in the current understanding, the required scale of organization, biophysical and social systems. In such an ever-changing setting, fixed rules are likely to fail because they place too much confidence in the current state of knowledge. It may seem to some that allowing the room for flexibility in the existing systems may be suboptimal. But that will only apply in short run as allowing the institution to be adaptive will prove wiser in the long run.

If the objectives and requirements are known to one while devising an institution, the next step is to find some strategies through which the requirements of flexible or adaptive governance can be met. There are some general strategies or principles for robust governance institutions for localized resources which are well established in the existing literature. Below are the ones which are relevant for the problems faced at a large scale, in particular.

1. *Analytic deliberation*: It is crucial that the stakeholders (scientists, resource users and public) have a well-structured dialogue based on the analysis of key information about environmental and human-environment systems. Such analytic deliberation provides improved information for

future plan of action and builds social capital. Having such deliberation allow for change and deal with inevitable conflicts as well as it helps to produce consensus on governance rules.

2. *Nesting*: Institutional arrangements must not be simple and one layered. They need to be complex and nested in many layers. The strategy should involve market-based governance for the world's resources at one-level and centralized command and control at the other level which eliminates apparent redundancies which have proved to be inefficient over time. In case only the central governments exert sole authority over the resources, there can be catastrophic failures.
3. *Institutional Variety*: Ideally the governance should be a mix of diverse institutional types. Governance can be effective if it includes hierarchies, markets and community-based self-governance. This structure has a potential of employing a variety of decision rules to change incentives, increase information, monitor use, and induce compliance. The rule evaders or defaulters have many ways to evade the system but the existence of multiplicity of rules than with a single type of rule is somewhat successful in weeding the evaders.

10.5 INSTITUTIONAL TRAJECTORIES AND ECONOMIC PERFORMANCE

After all the discussion in earlier sections, one would want to know how the institutions (State, private or community based) help an economy achieve its productive potential. An important factor (in addition to the endowments of a country) to consider while looking at the economic performance of different countries is that these countries follow or adopt different economic policies and institutions. This leads to the variation in the economic performance.

Let us take an example of the per capita income of a nation. We observe huge variations in the per capita income of a rich country and a poor country. There are two possible explanations of such differences. The first possibility is that, national borders mark differences in the scarcity of productive resources per capita and the aggregate production function methodology also differs. Simply put, the poor countries are poor because they are short of resources (like land, natural resources, human capital, latest technology). The rationality of individuals in a country brings that country quite close to its potential, given their different potentials. The second possibility is that due to national borders the public policies and institutions are not only different for different nations, but in some cases better and in other cases worse. The countries which practise better institutions are able to reach closer to their potential and vice versa. The potential is not reached by individual rationality but by achieving socially efficient outcome. The earning capacity of a country can easily be increased with efficient use of the natural and human resources. The poorer countries lack the structure of incentives that brings out the productive cooperation. The chosen economic policies time to time and the institutional arrangements lead to a structure of

incentives. That also depends on the legal systems that enforce contracts and protect property rights and on the political structures, constitutional provisions, and the extent of special-interest lobbies and cartels.

Now we need to know why variations in institutions and policies are the main determinants of international differences in per capita incomes. Sometimes the economic policies and institutions of the low-income countries keep capital in these countries from earning rates of return appropriate to its scarcity. Similarly, such policies make foreign investors and foreign firms unwelcome, or provoke the flight of locally owned capital, or make lending to these countries highly risky. So, the institutional and policy shortcomings of a country keep it from achieving its potential. Also, the type of human capital a country possesses matters in terms of achieving the potential. The people should have a good amount of knowledge about how they should vote and about what public policies will be successful. If many voters acquire more knowledge and are able to assess about the real consequences of different proposed public policies, then those public policies will improve and thereby increase real incomes in the society. But this better knowledge of public policy is usually not marketable. So, this public good human capital or civic culture is not normally marketable and only affects incomes by influencing public policies and institutions. The existing literature suggests that the economic performances of Hong Kong, Taiwan, West Germany and South Korea have been much better than the performances of mainland China, East Germany and North Korea. These are the pair of countries having similar cultural characteristics but great differences in economic performance. These differences cannot not be explained by differences in the marketable human capital of the populations at issue. The hypothesis that economic performance is determined mostly by the structure of incentives and that it is the national borders that mark the boundaries of different structures of incentives, has a lot of evidence in its favour. There is also direct evidence of the linkage between better economic policies and institutions and better economic performance.

Low-income nations may specialise in trade and experience gains from that. But they do not have the institutions that enforce contracts impartially, they do not have institutions that make property rights secure over the long run. Institutions which ensure greater self-expression, allow the free flow of information and encourage the formation of associations and clubs lead to greater economic benefits. The democratic institutions allow greater sharing of resources and state reduces the risks involved in the economic activity. Welfare state is an institution which pools the resources to provide the investments in education, health and infrastructure and constrains the effects of business cycles. Pooling resources is a fundamental step as it complements the private investment as well which furthers the economic interaction between various players. Institutions can be both informal (e.g., moral codes, self-enforcing agreements) and formal (legal rules enforced through third parties). The relative importance of formal institutions increases as the markets widen and deepen. Informal institutions are

like public agencies, trade unions, community structures and professional associations.

A nation follows many growth augmenting strategies. But they alone are not sufficient for reaping the economic benefits. Without institutions, growth runs out of steam and the economy will not remain resilient to shocks. So, we need high-quality institutions which induce socially desirable behaviour on the part of economic agents. Some of the institutional ingredients of a self-sustaining market economy are public bureaucracies, independent judiciaries, stabilizing fiscal policy, antitrust and regulation, financial supervision, social insurance, political democracy.

10.5.1 Institutions in India and Economic Growth

A perception which is commonly voiced is that public institutions in India are on a decline, they are weak and severely stressed. In the academic world is cautious on the debate about condition of India's institutions. India is densely populated and is very heterogeneous. Some of the new institutions such as the Telecommunications Regulatory Authority of India (TRAI), Securities and Exchange Board of India (SEBI), and Insurance Development Regulation Act (IDRA) have performed very respectably, given the features of the country. In terms of employment, the Central Union Public Service Commission still oversees a selection process that is fair and merit-based. Greater decentralization and transparency have been introduced through the Panchayati Raj initiatives and the Right to Information (RTI) Act. And the introduction of computer-based technologies has improved efficiency in a number of areas, like the computerised bookings in railways and air travel, online filing of income tax returns, virtual payment of different taxes like property tax and online banking.

The effects of institutions in India can also be separated at the level of the states. The formal reforms of 1991 at the centre were appreciated and received a lot of publicity. What was less noticed was the growing decentralization of policy. For a long time, we observed the dominance of Congress party over the politics and institutions of the country. But, with its dispersion came the scattering of the political power which created the centrifugal forces that led to decentralization of economic power and hence policy. Greater economic decentralization meant states could differentiate themselves. States differ in their ability to attract private sector investment, which is a significant factor in terms of economic performance of the states. This decentralisation process was further strengthened by the gradual dismantling of the industrial licensing system. When the centre was deciding where and how much electricity capacity to install, there was little that the states could have done to enhance their economic performance. In the pre-1980s era centre was the deciding authority. Existing research informs that when we relate state-level growth to state-level institutions we find that the latter have no role in explaining growth prior to 1980 but a robust role in explaining post-

1980s, especially post- 1990s growth. Hence, the economic decentralization became important and states' economic performance was closely tied to state-level institutions in the post-1980s period.

The core market-creating public institutions were created during the India's pre-independence era. These institutions are taken as a key to India's long-run growth but they may not have kept pace with Indian economic veracities. India's institutions have shown the signs of weakness in terms of being slow to adapt or change. This may sputter country's growth engine. Sustaining growth is more difficult than igniting it, and requires more extensive institutional reform. Growth spurts are associated with just a narrow range of policy reforms.

The policy reforms which are related to growth transitions need to have elements of both orthodoxy with unorthodox institutional practices.

Check Your Progress 2

- 1) Enlist any three factors which make it easier to organise the collective action.

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- 2) Discuss any three main challenges of governance.

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- 3) Explain the relationship of institutions with the economic performance of a nation.

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- 4) Discuss India's institutional trajectory in brief.

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10.6 LET US SUM UP

Institutions are the rules which help us play the game of management. The primary function of any institution is to deal with common resources in a manner that the outcome is socially efficient. We began the unit by understanding the need of institutions and policies. The rational individual may not lead to optimality when it concerns the commons available for the whole population or where the property rights are not clearly defined. Destruction of resources is a major concern for all the nations. Three models (Tragedy of commons, Prisoners' dilemma and the logic of collective action) provide us the base to understand the requirement of institutions. The alternatives available are state-led institutions (formal or informal) or the community-based local institutions which have been mostly successful in the management of the common resources. We then moved on to find out how the economic performance of any nation is not only dependent on its resource endowments but also on the type of institutions and policies a country formalizes and practises. Lastly, we discussed the Indian scenario in relation to the reform policies and decentralization of institutions with the background of economic development and its relation to the institutions.

10.7 ANSWERS/HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

- 1) Refer section 10.2
- 2) Refer section 10.2
- 3) Refer section 10.2
- 4) Refer section 10.3
- 5) Refer section 10.3

Check Your Progress 2

- 1) Refer section 10.4
- 2) Refer section 10.4
- 3) Refer section 10.5
- 4) Refer section 10.5

UNIT 11 THEORIES OF REGULATION*

Structure

11.0 Objectives

11.1 Introduction

11.2 Economic Regulation

11.2.1 Direct Regulation

11.2.2 Price Controls

11.3 Regulation of Natural Monopolies and Public Utilities

11.4 Public Interest Theory

11.5 Public Choice Theory

11.6 Theory of Regulatory Capture

11.6 Let Us Sum Up

11.7 Answers/Hints to Check Your Progress Exercises

11.0 OBJECTIVES

After going through the unit you should be able to:

- Define economic regulation;
- Discuss the arguments in favour of economic regulation;
- Describe the various types of regulation, particularly regulation of public utilities;
- Critically evaluate the public interest and public choice theories of economic regulation; and
- Discuss the theory of regulatory capture.

11.1 INTRODUCTION

This unit and the subsequent one take up for discussion issues relating to governance in developing nations. In the previous unit you studied about institutions and democracy. You would have realized that institutions and democracy have important bearing on economic outcomes and on the process of economic development of developing nations. Hence it is important to understand the role of government in economic development.

In your earlier courses on microeconomics and macroeconomics, you became familiar with the role of government in promoting efficiency in the economy, in establishing and maintaining property rights and rule of Law, and also macroeconomic policies like fiscal and monetary policies as well as policies related to international trade and finance. The previous unit (Unit 10) discussed the role of institutions, as well as the State and democratic processes in economic

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development. Other than the legal and governance framework and various policies like monetary and fiscal policies, the state participates in the economy through ownership, as well regulation. In the last unit of this course, we will go into greater detail about the ways government action can fail to enhance welfare, and also about corruption. But before that, in this unit, we look at one type of government participation in the economy, namely, economic regulation.

As you would know, regulation can be economic as well as in non-economic spheres. As an example of non-economic regulation, government can regulate protocols with regard to patients of some pandemic in terms of isolation or quarantine. In this unit we shall consider economic regulation and not non-economic regulation. Economic regulation basically suggests that there are areas or sectors which the government may not own, or participate as producer or provider of services, but regulates the private sector which provides the services or products in this area.

The unit is organised as follows: the next section we discuss economic regulation. The section explains what regulation means and who does the regulating. It discusses the aims of regulation and what are the arguments for regulation. It discusses in some detail the regulation tools at the disposal of the regulating agency. The various types of regulation, like direct regulation, price regulation, regulation of entry and exit etc., are discussed. In the next section, the method of regulating a natural monopoly and public utility are discussed. Natural monopoly is defined not so much in terms of number of firms present in the market, but whether a single firm is able to cater to all of the demand in the market. We find that often public utilities are natural monopolies in that a single firm meets all of the demand for the utility in a given geographical area. The unit discusses how public utilities are regulated.

The unit then goes on to discuss two important theories regarding economic regulation. First, the public interest theory of regulation will be discussed. This theory assumes that regulators act in the public interest and have the interest of the consumers and the general public in mind. It also assumes that regulators have full information and knowledge about all relevant parameters. A later variant of the public interest theory suggests that regulation may not lead to optimal efficiency and there may be costs to regulation, but regulation can lead to corrections for market failures. The other theory of regulation is public choice theory. Public choice theory suggests that government officials like regulators act in their own interest most of the time, and their actions do not always further the public interest. Applied to the area of economic regulation, public choice theory. Hence in most cases economic regulation does not lead to optimal outcomes in terms of efficiency and resource allocation. Finally, the unit discusses the theory of regulatory capture, which suggests that those firms that are being regulated end up 'capturing' the regulatory process, and the regulatory authorities end up taking actions that help the firms themselves. The theory of regulatory capture suggests that not only does not serve the public interest, but regulation can

actually help the organisation or firm being regulated as the firm can manipulate and 'capture' the regulatory process, and turn the regulatory process to its own advantage.

11.2 ECONOMIC REGULATION

Regulation can be in several diverse areas and fields. There can be social regulation as government may regulate social processes and behavior. In this unit we are concerned with economic regulation. Economic regulation, in its essence, seeks to modify economic behavior by certain economic agents. It works as application of law by the government or other agencies with various objectives in mind, such as correcting for market failure, protecting the environment, controlling restrictive trade practices or monopoly pricing. Regulation is one of the ways in which the government intervenes in the market. Thus, regulation is by government agencies or autonomous bodies statutorily created. Secondly it is private sector firms or economic agents that are regulated. Third, economic regulation seeks to modify the behavior of private firms or economic agents or to influence economic processes to yield outcomes that are welfare enhancing for society as a whole. Regulation refers to actions undertaken by the central or state governments to influence market outcomes, such as the quantity traded of some good or service, or their price or quality. Regulation can also be in the form of taking steps to ensure that monopolies are not formed or collusive behavior by firms does not take place. It can take the form of enforcing property rights. The government can also take steps to regulate activity that creates negative externalities. Governments can take direct steps to prevent pollution by firms, for instance by prohibiting firms from spilling sewage into rivers, instead of resorting to taxation. Often the government sets up special agencies which act as regulators in various areas. In India some important regulatory authorities are Securities and Exchange Board of India (SEBI), for capital markets, Insurance Regulatory and Development Authority of India (IRDAI) for regulating insurance companies, Pension Fund Regulatory and Development Authority (PFRDA), Telecom Regulatory Authority of India (TRAI), for regulating the entry and exit of firms, conducting auctions and also pricing in the telecom sector, Food Safety and Standards Authority of India (FSSAI) related to food, Bureau of Indian Standards (BIS), for ensuring a generally high standard of quality of products Central Drugs Standard Control Organisation (CDSCO) for drug pricing etc, National Green Tribunal for maintaining environmental standards, and Competition Commission of India (to regulate competition). The CCI was established in 2003 to oversee competition and enforce Competition Act 2002. The CCI became operational from 2009. It replaced the Monopolies and Restrictive Trade Practices Commission which had been set up to oversee the Monopolies and Restrictive Trade Practices Act, 1969. The competition commission of India acts to prevent monopolies, to ensure competition to oversee mergers and acquisitions. Let us now see the various instruments of regulation, the instruments through which the government.

11.2.1 Direct Regulation

There are several ways in which government regulates private sector provider of goods and services. One way is what is called direct regulation. Direct regulation is also known as command- and –control regulation. In this form of regulation, the government takes certain actions to control the amount of a certain activity. In this form of regulation the government aims at control of quantity.

The example about pollution is an instance of direct regulation. Ensuring safety of food and medicines is another instance of direct regulation. Food Safety and Standards Authority of India (FSSAI) regulates levels of safety of food products in India. Supposing it is left to the market to ensure that products meet quality. It would be difficult as in the market system it would be costly for each individual consumer to acquire information about quality. Consider medicines. Each consumer would find it very difficult to ascertain that medicines meet a certain standard. Moreover each consumer would separately have to determine and gauge quality, and there would be massive duplication of effort. Another example of direct regulation would be sale and purchase of alcoholic drinks. Some governments may impose prohibition and prohibit the sale of alcohol in that state. Residents of that state may be required to have permits to bring in alcoholic drinks from other states. Or the government may fix a certain minimum age for a person to be eligible to purchase or consume alcoholic drinks.

11.2.2 Price Control

Sometimes the government intervenes in the market by setting a maximum or minimum price for some product. The regulated price may take the form of price controls. These controlled prices may be above or in some case below the equilibrium market price that would otherwise prevail. For example, rent may be controlled in the sense that the government may decree that rent cannot be above a certain level. Or in the labour market, the government may fix a minimum wage that employers, even in the private sector, have mandatorily to pay their workers. In India, in some cities, fares of taxis and auto-rickshaws may be determined by the government in terms of the maximum fare at the base or starting level, and how much additional fare the driver is allowed to charge per kilometer. However, since monitoring costs may be high, actual auto-rickshaw fares are sometimes determined by bargaining between the driver and passenger!

Price regulation may specify a particular price that firms must charge, or may instead restrict firms to setting price within some range. If the concern of the regulating agency is that a regulated monopolist will set price too high, regulation is likely to specify a maximum price that can be charged. If the regulated firm has some competitors that are unregulated, the regulatory agency may also be concerned that the regulated firm will engage in predatory pricing (that is, pricing so as to force its competitors to exit the market). In that situation, regulation is likely to involve a minimum price as well as a maximum price. Sometimes, regulation specifies more than a single price. The specification of a price structure as opposed to just a single price greatly increases the complexity

of implementing economic regulation and can result in additional welfare losses. In practice, price regulation may be the means by which a regulatory agency achieves an ultimate objective of limiting industry profit. A regulatory agency often sets price so that the regulated firm earns a normal rate of return. This is standard practice in the regulation of public utilities, as we shall see in the next section.

11.2.3 Control of Entry and Exit

Now we look at a way to regulate firms that does not rely on direct regulation or price regulation. The two principal variables that regulators have controlled are price and the number of firms, the latter through restrictions on entry and exit. These variables are important because price and the number of firms are the main determinants of both allocative and productive efficiency. Entry may be regulated at several levels. First, entry by new firms may be controlled, as is typically done in the regulation of public utilities. In addition to controlling entry by new firms, a regulatory agency may also control entry by existing regulated firms. These markets may already be served by other regulated firms or may be unregulated markets. A basis for exit regulation is that regulation strives to have services provided to a wider set of consumers than would be true in a free market. Attaining this goal may entail regulated firms serving unprofitable markets, which creates a need for regulations that forbid a regulated firm from abandoning a market without regulatory approval.

11.2.4 Control of Other Variables

Sometimes regulators may try to regulate some other variables like quality of service. The essence of economic regulation is the limitation of firm behavior regarding price, quantity, and entry into and exit out of markets. Obviously, firms choose many other decision variables. One of these is the quality of the product or service that they produce. A regulatory agency may specify minimum standards for reliability of a service. If an electric utility has regular blackouts, the regulatory agency is likely to intervene and require an increase in capacity in order to improve service reliability. Although product quality may also be controlled for reasons like product safety, economic regulation does not typically place serious restrictions on it.

One reason for the minimal use of quality regulation is the cost of implementing it. To control any variable, the relevant economic agents have to be able to agree on what the variable is and what restrictions are placed on it. In the case of price and quantity, this is not difficult. The price is the amount paid by the consumer for the good, which is relatively easy to observe. Furthermore, restrictions take the simple form of numbers: a maximum price and a minimum price. Similarly, the measurability of quantity allows a regulatory agency to specify restrictions on it. However, quality is typically neither so well defined nor so easily observed.

11.3 REGULATION OF NATURAL MONOPOLIES AND PUBLIC UTILITIES

In the previous section, you became acquainted with the concept of regulation and the various ways in which regulation is carried out. This section focuses on the regulation of natural monopolies. Let us see what is a monopolist and a natural monopolist. You may recall your study of a monopolist in your courses on microeconomics. We know that a firm's domination of a market is most complete when it is the sole seller or sole buyer in a market, that is, when it is a monopolist or a monopsonist. This section examines some of the consequences of monopoly. What is then a natural monopolist. Let us recall the definition of returns to scale. A production process displays increasing returns to scale if output more than doubles when the use of every input is doubled. The cost curves of a firm that produces under increasing returns to scale have two important properties:

- Average cost falls as output rises.
- Marginal cost is everywhere below average cost.

A market in which production is characterized by increasing returns to scale is said to be a **natural monopoly** because only one firm can survive in such a market. Initially, a number of competing firms will "race to get big." The larger firms will have lower average costs than their smaller competitors and will be able to charge lower prices. The smaller firms will be unable to earn profits and will be driven from the market. Ultimately, only one firm will remain in the market.

Utilities are often natural monopolies because they deliver services through networks. An electric power company, for example, must have generating stations to produce power and trunk lines to distribute it before it can begin operations, but it can then deliver power to large numbers of customers by connecting them to its power grid. The expansion of its customer base allows the power company to spread the fixed costs (of the generating stations and trunk lines) over a greater number of users, so that average cost falls. Similar arguments apply to water and sewage systems, mail delivery, local telephone service, cable TV, and railways. The monopolist maximizes its profits by expanding production until marginal cost is equal to marginal revenue. These choices do not maximize society's welfare. You have read earlier that apart from producers' surplus and consumers' surplus, there is deadweight loss under monopoly. This loss of surplus (that part which belongs neither to consumers' surplus nor to producers' surplus) is called the welfare cost of monopoly. A monopolist will charge more and produce less than a perfectly competitive firm,

There are two ways of increasing the net social benefits of a monopoly. The first is to regulate the monopoly, meaning that the government sets the monopolist's price and output. The second is for the government to purchase and operate the firm. A regulator would require the monopolist to raise its output so that the welfare cost of the monopoly is reduced. It could not, however, require the

monopolist to increase output to the level of competitive equilibrium output. In the long run the firm would make losses and abandon the market, and net social benefits would ultimately be lower than they were before the regulator's intervention.

What is the best outcome that the regulator can achieve? Social welfare increases as output rises but the monopolist's profits fall. The monopolist should be required to raise its output until its profits are driven to zero (since these are the smallest profits consistent with the monopolist's continued participation in the market). The regulator wants profits to fall to zero at the highest possible output, so it will allow the monopolist to charge the highest price that the market will bear. Then the monopolist's price is equal to the vertical distance to the demand curve and its average cost is equal to the vertical distance to the average cost curve. Its profits are zero when these two distances are equal.

The alternative to regulation is government ownership. A government-owned firm does not need to earn non-negative profits, because its fixed costs can be paid out of the government's general revenues. A change from regulation to government ownership would eliminate the remaining welfare cost of monopoly.

The above points may have made you think that social welfare is higher under government ownership than under regulation, but it is somewhat misleading. The fixed costs of a government-owned monopolist are paid out of tax revenues, so opting for government ownership forces the government to adjust its budget. It has two options: it can reduce spending on other programmes, or it can raise tax revenues.

Hence, in some cases, regulation might be preferred to government ownership.

Both policies have been, and are being used to deal with natural monopoly. Utilities like water, sewage, and mail delivery are natural monopolies, and these services are typically provided by government-owned firms. Local telephone service and cable TV are often provided by monopolies that are regulated.

Let us now discuss further the regulation of public utilities. Public utilities are found both in the public as well as private sector. The first objective in regulating a public utility is to make it charge a price that would be fair and reasonable to consumers. Further, there are issues like marginal-cost pricing and optimal pricing. There is also the institutional approach to rate-making, which looks at the criteria by which the base rate is determined and a fair rate of return to the public utility.

Public utilities as we saw above are natural monopolies which have increasing returns to scale, and hence decreasing average costs.. When looking at the demand for the public utility service, we find that demand is determined by the time pattern, and the elasticity of demand.. Thus often there is price discrimination. The crucial task of the regulator is to determine a reasonable price. that is equitable. A theoretical first-best criterion is to choose the price such that it equals marginal cost. In perfect competition, price would also equal

average cost. But in monopoly marginal cost pricing would probably lead to losses which may be subsidized, and there may be corresponding increasing in taxation. There can be a two-part tariff to ensure that the public utility covers its marginal as well as fixed costs. Another type of differential pricing is peak-load pricing, often used in electricity pricing. Here prices are charged differently at different times depending on demand. Hence marginal cost will differ and capacity utilization would vary. Sometimes in practice, marginal cost pricing is difficult to use, and hence a reasonable rate is determined that allows the public utility to get a reasonable rate of return on the capital invested. It is necessary to establish a base rate which is the property value against which the firm's profits are compared. Cost of services, reasonable rate of return on capital invested are determining factors in arriving a pricing principle.

Check Your Progress 1

1. Explain the concept of direct regulation.

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2. Discuss how price regulation is carried out.

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3. What do you understand by a natural monopoly? Why are public utilities usually natural monopolies?

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11.4 PUBLIC INTEREST THEORY

There are two main approaches or views regarding economic regulation by the government. The first is public interest theory and the other is called public choice theory. Basically, these approaches differ in the way that the government is perceived; the first approach sees the government or the State as a benevolent agency, having the public interest in mind. The latter sees the government as just another economic agent in the economy, or rather the individuals who form the government—legislators, ministers, government officials, et al—as yet another set of economic agents who optimize their chosen objective functions, which may

not be in consonance with social welfare or public benefit. We discuss public choice theory in the next section. In this section, we discuss the public interest theory of regulation.

The first group of regulation theories proceeds from the assumptions of full information, perfect enforcement and benevolent regulators. According to these theories, the regulation of firms or other economic actors contributes to the promotion of the public interest. This public interest can further be described as the best possible allocation of scarce resources for individual and collective goods and services in society. In western economies, the allocation of scarce resources is to a significant extent coordinated by the market mechanism. In theory, it can even be demonstrated that, under certain circumstances, the allocation of resources by means of the market mechanism is optimal.). Because these conditions do frequently not apply in practice, the allocation of resources is not optimal from a theoretical perspective. This situation is described as a market failure. A *market failure* is a situation where scarce resources are *not* put to their highest valued uses. In a market setting, these values are reflected in the prices of goods and services. A market failure thus implies a discrepancy between the price or value of an additional unit of a particular good or service and its marginal cost. Equalization of prices and marginal costs characterizes an equilibrium in a competitive market. If costs are lower than the given market price, a firm will profit from a further expansion of production. If costs are higher than price, a firm will increase its profits by curtailing production until price again equals marginal cost. A market equilibrium, and more generally an equilibrium of all markets is thus a situation of an optimal allocation of scarce resources. In this situation supply equals demand and under the given circumstances economic agents can do no better.

One of the methods of achieving efficiency in the allocation of resources when a market failure is identified, is government regulation. In the earlier development of the public interest theories of regulation, it was assumed that a market failure was a sufficient condition to explain government regulation. But soon the theory was criticized on the grounds that it assumed that theoretically efficient institutions could be seen to efficiently replace or correct inefficient real world institutions. This criticism has led to the development of a more serious public interest theory of regulation by an “Economics of Law” approach. In the original theory, the transaction costs and information costs of regulation were assumed to be zero. By taking account of these costs, more comprehensive public interest theories developed. It could be argued that government regulation is *comparatively* the more efficient institution to deal with a number of market failures. Thus this approach, in contrast to the earlier approach, suggested that in the presence of market failure, government regulation can comparatively improve the situation, but there is no guarantee that regulation will lead to optimal efficiency conditions. For example, with respect to the public utilities, as we have seen, the transaction cost of government regulation in establishing fair prices and a just rate of return are lower than the costs of

unrestricted competition. These more serious versions of the public interest theories do not assume that regulation is perfect. They do assume the presence of a market failure, and assume that regulation is comparatively the more efficient institution and also, that for example **deregulation** takes place when more efficient institutions develop. These theories also assume that politicians act in the public interest or that the political process is efficient and that information on the costs and benefits of regulation is widely distributed and available.

Imagine an unregulated natural monopoly firm supplying public utility services. The firm makes supernormal profits, charges different prices to different consumer groups and does not supply services to high-cost consumers in rural areas. Economic theory predicts an inefficient allocation of resources. Without regulatory intervention these costs are high. Intervening in the market results in a decline of these welfare costs. The stronger the level of intervention, the lower the welfare losses in the private sector will be. The naïve public interest theory of regulation for example, would explain 'fair rate of return' regulation from the presence of the natural monopoly firm. Prices must decline and production increased until societal resources are allocated efficiently. The more complex public interest theories of regulation take the costs of regulatory intervention into account. The more a regulator intervenes in the private operation of the firm, the higher the intervention costs will be. The regulator must have information on cost and demand facing the firm before efficient prices can be determined. There will be compliance cost for the firm in terms of time, effort and resources. It will have to comply with procedures, adapt its administration and incur productivity losses. Once put into practice, the cost of monitoring firm behavior and enforcement of the regulations arises. It is to be expected that the firm will behave strategically and conceal or disguise any relevant information for the regulator. Furthermore, indirect costs are to be expected. The less profit the firm makes, the lower the effort in decreasing production cost or in developing new products and production technologies. Also less tangible effects are predicted. Regulatory intervention makes private investments less secure. Risks go up. Investment can decline. The public interest theories of regulation thus basically assume a *comparative analysis of institutions* to have taken place to efficiently allocate scarce resources in the economy.

11.5 PUBLIC CHOICE THEORY

In the previous section, we looked at the public interest theory of regulation. The public interest theory posits that governments act in the public interest. It will regulate in such a way that will benefit society. Since economic regulation is carried out by government agencies, we need to look at the behavior of personnel and officials in various government agencies and organs of government.

There is a school of theorists called public choice theory that says officials in government agencies behave rationally just as economic agents like firms and consumers do. The theory says government officials have objective functions that they optimize

subject to constraints. Public choice theory is also known as economic approach to political science.

Applied to regulation, public choice theory says we should look at the motivation and incentives of the members of the regulating agency in regulating the firm. Each official and member of the regulating agency will act in a way so as to maximize his or her own utility. Thus the official will look at his or her own gain, rather than that of society in implementing the regulation. If the officials find that regulating the price, for example, do not lead to any gains for them they may be lax in implementing. On the other hand the officials, having the power over the firm may bargain with the firm in getting a good deal for themselves in return for arriving at a regulatory system or level that does not hurt the firm too much.

In effect, public choice theory suggests that officials who make up government organizations like regulating agencies, are likely to act to promote their own gain rather than the public interest. The implicit suggestion is that the economic regulation of firms is not likely to maximize social welfare. Hence the underlying prescription is that government should not interfere with the market mechanism even in the presence of market failure.

In the next section we look at a theory of economic regulation that is related to public choice theory.. This theory also contends that economic regulation does not always lead serving the public interest. Thus that theory is also opposed to the public interest. Let us now study this theory, known as the theory of regulatory capture.

11.6 THEORY OF REGULATORY CAPTURE

We saw above that the approach of public choice theory to analyzing government processes and institutions to view government officials just as private economic agents. Just as usual economic agents like consumers or firms optimize utility functions or profit functions, public officials are also assumed to have their own objective functions which they optimize. This objective function of public officials may not be in consonance with the public interest. In the previous section we saw that theorists belong to the public choice tradition suggest that regulators may use their regulatory power to extract benefits for themselves. In this section we discuss a variant of the public choice approach. This variant is called the theory of regulatory capture. Let us see what this theory says about economic regulation.

Basically, the theory of regulatory capture says that the regulatory process is 'captured' by the very organizations or groups that are being captured, like monopolies or firms in oligopolistic industries.. This means that if say a dominant firm in an industry is being regulated in terms of price, or capacity enhancement, this firm can take steps and manipulate the regulatory process such that regulation is also made in terms of regulating the entry of new firms. This ensures that firms that can be potential competitors to the existing firm in the market are kept out and this existing firm can continue to enjoy monopoly power. Let us learn about this theory a little more.

To understand the process of regulatory capture, consider a monopolist supplying a good or service in a certain area. To make it more concrete, suppose the firm is a natural monopolist supplying a public utility, say, electricity in a certain geographical area. Let there be a regulatory body set up to monitor price or tariff by the electricity utility monopoly firm. Let us denote the firm by F and the regulatory authority or regulatory agency (set up by the government) by RA . Let us see the likely events. The monopoly firm F would like to charge a monopoly price P_m and supply the quantity Q_m . This would generate monopoly profit for the firm. On the other hand, the regulatory agency RA has the role to ensure that the firm sells at the price P_c to every customer in the area, where P_c is the competitive price. This would result in the competitive quantity Q_m being supplied. In effect this regulatory procedure has the objective of making the monopolist behave like a competitive firm. This would be in the public interest. The regulator RA wants the firm F to act like a competitive firm, though the firm has an incentive to act like a monopolist.

The situation for RA is that if it wants F to charge P_c , it must know the firm's cost function. But the problem that RA faces is that the firm has this information. After all, it is the firm that is likely to have the information about its costs. Now RA has to get this information from the firm F . There is the issue of how costs are to be measured and which expenditure by the firm is to be included in costs. Moreover, and this is crucial to understand, the firm has an incentive to show its costs as high as it can. The regulated firm has a clear informational advantage over the regulatory agency, because the firm controls the information that goes to the regulatory agency.

What incentives do the various parties have? The firm has an incentive to represent its costs as high as possible, because that will make the regulatory agency set P_c at a very high level, thus allowing the firm to get higher profits. The regulatory authority will then set a price which would allow the firm to get a high return on investment, and this in turn will induce the firm to invest more. What incentive would the regulatory authority have? We may think that the regulatory authority would have the incentive to fix the price at P_c but in reality it is the consumers that have to pay this price. The RA does not have to pay. And the consumers who would like to pay an electricity tariff of P_c are not members of RA . Consumers are another group, another party to this process, but no individual consumer has the incentive or ability to be informed or to see that RA looks after their interest. An individual consumer has no interest in even participating in the whole process. For an individual consumer a low level of P_c is some small money saved compared to if the competitive price level tariff is set at a high level. But for the firm, a few rupees gained from each consumer due to competitive price level tariff being set at a higher level transforms into a large amount in the aggregate of gain in revenue from all consumers. Since gain from added information about costs of firms is very low for an individual consumer, each consumer individually is rationally ignorant.

Now, when the RA sets the rates, consumers will not be aware of what is happening, but the firm is very aware. Here, apply public choice theory and see what an individual member of the RA might be thinking. Many of the members of the RA would be knowing or come to know individual members of the firm, and may not feel like opposing members of the firm. Some may even be given economic incentives by the firm to carry out their interests. In some cases it has been seen that members of RA might feel that since they have been dealing with a firm dealing with a certain product or a public utility, and since the firm also knows it, the member of the RA has the possibility of being given employment in the firm after the person ceases to be a member of the RA, or after retirement. Thus an individual member may, in accordance with what is suggested by public choice theory, act in such a way that the interest of the firm ends up being served rather than the interest of the public. Regulatory capture was sought to be explained through the example of regulation of a firm supplying electricity, but such situations can happen in other industries too, like pharmaceuticals.

After the public interest theory had come to be questioned as a result of empirical and theoretical research, the *capture* theory was developed mainly by political scientist. This theory as explained above assumes that in the course of time, regulation will come to serve the interests of the industry involved. Regulatory authorities subject an industry to regulation by an agency if abuse of a dominant position is detected. In the course of time, other political priorities arrive on the agenda and the monitoring of the regulatory agency by authorities is relaxed. The agency will tend to avoid conflicts with the regulated company because it is dependent on this company for its information. It often also does not have unlimited resources which makes it aware of the costly effects of litigation of its decisions. Furthermore, there are career opportunities for the regulators in the regulated companies. This leads in time to the regulatory agency coming to represent the interests of the branch involved.

Now we turn to some criticisms directed at the theory of regulatory capture. The capture theory is unsatisfactory in a number of respects. First of all, there is insufficient distinction from the public interest theory, because the capture theory also assumes that the public interest underlies the start of regulation. Secondly, it is not clear why an industry succeeds in subjecting an agency to its interests but cannot prevent it being created. Thirdly, regulation sometimes may appear to serve the interests of groups of consumers rather than the interests of the industry. Regulated companies are often obliged to extend services beyond voluntarily chosen level of service. Examples are transport services, the supply of gas, water and electricity and telecommunication services to consumers living in widely scattered geographical locations. Fourthly, much regulation, such as environmental regulation, regulation of product safety and labor conditions are opposed by companies because of the negative effect on profitability. Finally, the capture theory is more of a

hypothesis that lacks theoretical foundations. It does not explain why an industry is able to 'take over' a regulatory agency and why, for example, consumer groups fail to prevent this takeover. One reason could be that consumers are often not organized into a pressure group. Nor does it explain why the interaction between the firm and the agency is characterized by capture instead of by bargaining. According to these theories, capture is the result of the increasing power of the agency which arises because the agency in its ongoing relationship gets to know the firm better and better. The agency has thus more and more opportunities to pursue its own objective and display moral hazard with regard to the political principal. The principal can only control this by having more stringent administrative rules and fair and open procedures.

Check your Progress 2

1. Discuss the public interest theory of economic regulation.

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2. In what way does public choice theory of economic regulation differ from public interest theory?

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3. Explain the theory of regulatory capture.

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11.7 LET US SUM UP

This unit was the second of the three units in this block. The block deals with the role of institutions and political processes in economic development. The present unit discussed economic regulation and a couple of theories that have been put forward to understand economic regulation, and how and why it takes place. In an era when government ownership and direct control over economic enterprise is lessening, the importance of the design of a proper regulatory process is of prime importance. We have seen across the world in the last few decades the process of deregulation of certain industries that used

to be regulated earlier. Hence it is of utmost importance that whatever the extent of regulation is there is carried out efficiently and optimally.

The unit began by explaining what is economic regulation and how economic regulation differs from social regulation. You were also familiarized with the types of economic regulation: direct regulation or regulation by quantity; price regulation; regulation of entry and exit, and so on. Then the unit went on to explain what is meant by a natural monopoly and how it is regulated. We saw that often public utilities are natural monopolies. Regulation of natural monopolies and public utilities was discussed in detail.

Following this, the unit discussed at length the two main theories regarding economic regulation. First, the public interest theory of regulation was discussed. This theory assumed that regulators act in the public interest and have the interest of the consumers and the general public in mind. It also assumed that regulators have full information and knowledge about all relevant parameters. A later variant of the public interest theory suggests that regulation may not lead to optimal efficiency and there may be costs to regulation, but regulation can lead to corrections for market failures. The other theory of regulation is public choice theory. Public choice theory suggests that government officials like regulators act in their own interest most of the time, and their actions do not always further the public interest. Hence in most cases economic regulation does not lead to optimal outcomes in terms of efficiency and resource allocation. Finally, the unit discussed the theory of regulatory capture, which suggests that those firms that are being regulated end up ‘capturing’ the regulatory process, and the regulatory authorities end up taking actions that help the firms themselves.

11.7 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See subsection 11.2.1
2. See subsection 11.2.2
3. See section 11.2.3

Check Your Progress 2

1. See section 11.4
2. See section 11.5
3. See section 11.6

UNIT 12 GOVERNMENT FAILURE AND CORRUPTION*

Structure

- 12.0 Objectives
- 12.1 Introduction
- 12.2 Market Failure
- 12.3 The Role of Government in a Developing Economy
- 12.4 Government Failure
 - 12.4.1 Meaning of Government Failure
 - 12.4.2 Causes of Government Failure
- 12.5 Corruption
 - 12.5.1 Concept of Corruption
 - 12.5.2 Causes of Corruption
- 12.6 Let Us Sum Up
- 12.7 Answers/Hints to Check Your Progress Exercises

12.0 OBJECTIVES

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

- Explain the concept of market failure and describe its consequences;
- Discuss the steps and measure the government can take to correct for market failure;
- Discuss the general role a government usually plays in a market or mixed economy;
- Explain what government failure means and how it leads to inefficiency;
- Explain what corruption means; and
- List the types of corruption and analyse its causes.

12.1 INTRODUCTION

This unit takes the discussion about the State and its role forward, from the previous two units. Unit 10 had discussed about democracy in general, and the role of institutions in economic development. The previous unit talked about economic regulation, and how economic regulation is carried out. Unit 11 had also talked about various theories of economic regulation, like public interest theory of regulation, public choice theory of regulation, and the theory of regulatory capture. This unit, the last of the course, provides a broad discussion about government and governance in the context of developing nations.

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The unit begins with a discussion of market failure. You have read about market equilibrium in your microeconomics courses. However there are situations where market equilibrium fails to attain Pareto optimality. This type of situation is called market failure. The unit discusses market failure in general and the various types of market failures there are, that is, the unit explains the various situations and conditions that lead to outcomes that are described as market failure. It then proceeds to suggest the role of government in correcting market failure.

The role of the government, particularly in developing nations, is not limited to correcting market failures. The government needs to establish rule of law, create a system of contracts and ensure that these are honoured and generally there is faith in the government. There are many other roles that the government plays in developing nations, and the unit discusses these.

There are situations where the government, for certain reasons is not able to realize its objectives. The government, in trying to correct market failures, ends up in a situation that is suboptimal. These are situations of government failure. Government failure is taken up for discussion.

Finally the unit presents a discussion on the problem of corruption. A definition of corruption is provided, various types of corruption are mentioned and causes of corruption is described.

12.2 MARKET FAILURE

Adam Smith, in his classic work *An Inquiry into the Nature and Causes of the Wealth of Nations* published in 1776 argued that individual pursuing their private ends would, through competition, be led to promote the public interest as though led by an 'invisible hand'. Ever since then, economists have widely agreed that competitive markets do lead to efficiency, but later on, economists realized that competitive markets promote efficiency if certain conditions are met, and there may be situations where the competitive market does not perform well or work perfectly.

The question is, what do we mean by efficiency, and what are these conditions that have to be fulfilled if the market is to promote efficiency? The basic answer is provided by what are called the two fundamental theorems of welfare economics.

The Fundamental Theorems of Welfare Economics

The first fundamental theorem says that under certain conditions, competitive markets lead to an efficient allocation of resources. Efficiency here means the allocation is Pareto- efficient and the situation is one of Pareto optimality. Pareto optimality means a situation where it is impossible to make someone better off without at the same time making someone else worse off. It may be possible to make someone better off. But at the same time, someone else will necessarily end up being worse off. If there is a situation where someone can be made better off but no one else ends up being worse off, the economy or the society in question has not yet reached a situation of Pareto optimality. When economists speak of efficiency they usually mean Pareto-optimal

situations. When an economy has reached a Pareto optimal state, it reaches a point on its utility possibility frontier and does not lie below the utility possibility frontier.

The second fundamental theorem states that given the proper initial distribution of resources, a decentralised competitive economy will attain some point on its utility possibility curve. Of course, any point on the utility possibility curve can be attained but the important thing is that it will be a point on the frontier and not below it. Of course, Pareto optimality says nothing about equity or the distribution of resources. Even under Pareto optimality there might be gross inequality. Even if the resulting income distribution is not acceptable, we need not abandon the competitive market mechanism. We merely have to redistribute the initial wealth. At some specific distribution of the initial wealth, there will be the decentralised market mechanism at work at will help to attain the desired outcome.

The fundamental theorems of welfare economics make a powerful case for the market mechanism. What it says is that if decision –making is decentralised, that is, individual decision makers independently make their own decisions based on their own self interest and there is competition at work, we do not need any centralised resource allocation mechanism like a planning agency. The second fundamental theorem gives a modern touch to Adam Smith’s principle of the invisible hand. The reason the second theorem works, that is, the reason a decentralised competitive system ensures Pareto optimality is that individuals, in making decisions to make optimum gains, equate their marginal benefit to the marginal cost. You have come across decision-making using marginal concepts in your microeconomics course. Of course, the fundamental theorems of welfare economics talks about a situation where there is no change, things are static, and firms are small and cannot influence prices. It gives quite a narrow perspective of competition. Sometimes, people have made a case for the market mechanism with quite a different perspective of the competitive system in mind. We have seen that the fundamental theorems of welfare economics assert that if certain conditions are met, the economy will be Pareto-optimal. There are circumstances or situations where the market is not Pareto-optimal or Pareto efficient. These situations are called situations of market failure and economists have suggested that these situations provide a justification for government intervention and activities. What are these situations? The main ones are:

Markets that are not competitive

Pareto optimality is attained only under situations of perfect competition. In some industries there may be a few large firms dominating the market. These situations may not be so bad if there are many potential entrants waiting to enter the market and provide competition. Pareto optimality will be much harder to attain if there are barriers to entry. If entry into a market were costless and easy, even the existing firms might behave in a competitive manner. Sometimes barriers to entry are created through government regulation, like giving a firm or at best a few firms some contract, and sometimes firms use the possibility of reaping scale economies, that is, increasing returns to scale to bar entry. Increasing returns to scale increasing returns to scale implies average cost of production declines with the scale of output. The government does sometimes regulate monopolies. The main reason monopolies are viewed with suspicion is that a monopolist

will generally restrict output to raise prices with a view to making profits. A monopolist, just like a firm under perfect competition, produces till the point where his marginal revenue equals his marginal cost. Under monopoly however, the prices are higher and equilibrium output is lower than under competition. Moreover, under monopoly, the monopolist takes off part of the consumer surplus. But there is a certain portion that accrues neither to seller nor to the buyers. This is called the deadweight loss under monopoly. It is for these reasons that markets with monopolies do not attain Pareto optimality and the situation is one of market failure.

Public Goods

There are goods that have two specific characteristics: firstly it is difficult to exclude anyone from consuming these goods. Light going out to ships from a lighthouse, or rather, the lighthouse itself is a classic example of this kind of a good in economics. The other characteristic is that there is no rivalry in the consumption of a good. Consumption by one person does not diminish the amount to be consumed by any one else. The marginal cost to the additional individual enjoying the good is zero. A classic example is national Defence. An example of a good showing rivalry is a shirt. These types of goods displaying rivalry and exclusion-ability are called pure public goods. The market will not supply, or will under-supply public goods, that is, supply in insufficient quantities.

Incomplete Markets

There are situations where markets fail to provide a good or service, even though the cost of providing it is not more than what consumers are willing to pay for it. We call this a situation of incomplete markets. This sort of situation is often encountered in financial markets, particularly in markets for credit and insurance. There is the related case of absence of complementary markets missing in some cases, or coordination failures. All these are situations of market failure. Many people advocate a strong government intervention in such situations.

Information Failures

Sometimes there is the presence of imperfect information in markets, and this provides a rationale for government intervention. In these situations the fear is that in the absence of government intervention, the market will provide too little information, so that some parties to a transaction can get too much benefit. Collection and obtaining of information ought not to be too costly.

There are other roles that have been put forward as legitimate for the State to intervene and act in the economy, even in a market economy. The first of these is to combat inflation, unemployment, and situations of disequilibria in some markets, that is, to smooth out the ill effects of business cycles. Macroeconomic stabilisation policy has long been an activity of the state, even in developed nations, particularly since the Great Depression of the 1930s. You can read about these policies in your macroeconomics course.

Two other important areas for the government to intervene in market economies have been: to improve the income distribution which might emerge as an outcome of the working of the market economy; secondly to compel people to

consume certain goods that the state thinks is in the best of the consumers themselves, or goods which consumers otherwise does not choose to consume even though they know it is in their own best interests. These goods are called merit goods. Private firms may provide these but also because the government has compelled the people to consume these. Examples of such merit goods are helmets for scooter riders or seat belts in cars. Some have viewed this action by the government as stemming from the government purporting to decide on behalf of consumers as a philosophy of paternalism. Critics feel a section of society is imposing its will on others.

One basic role of the government that everybody agrees is necessary is the government providing the legal framework and protecting property rights. This, it is felt will provide the necessary incentives and assurance to private markets to function smoothly and work efficiently.

12.3 THE ROLE OF GOVERNMENT IN A DEVELOPING ECONOMY

Governments in developing nations undertake activities in all areas of the economy, and government activities affect all the variables that influence economic development, either directly like investment in government assets, or indirectly, say, through fiscal and monetary policies.

Economists usually identify six major functions of governments in market economies. Governments provide the legal and social framework, maintain competition, provide public goods and services, redistribute income, correct for externalities, and stabilize the economy.

The government (1) provides the legal and social framework within which the economy operates, (2) maintains competition in the marketplace, (3) provides public goods and services, (4) redistributes income, (5) corrects for externalities, and (6) takes certain actions to stabilize the economy.

There are two views on what role the government should play in the economy: the conservative view, which is slightly Right-wing, and the liberal view, which has less than total faith in the market to be able to solve all problems of the economy and allocate resources optimally. The Conservatives believe that the government's role in the economy should be severely limited. They believe that economic and political freedom will be undermined by excessive reliance on government. Moreover, they question the government's ability to solve social and economic problems. They believe that faith in the government's power to solve these problems is unreasonable. They point to the slowness of government bureaucracy, the difficulty in controlling huge government organizations, the problems political considerations can breed, and the difficulties that arise when people try to learn whether government programs are successful or not. On the basis of these considerations, they argue that the government's role should be carefully limited. They call for more and better information about what government can reasonably be expected to do (and do well).

What is the Liberal view? While conservatives often question the government's ability to solve important social and economic problems, liberals often question the market's ability to solve such problems. They point to important limitations within the market system, and they claim that the government can do a great deal to overcome these limitations. Government can regulate private economic activity—for example, through minimum-wage laws. It can also provide goods and services that private businesses produce in insufficient quantities—for example, health care for the poor. Liberals are concerned with certain consequences of market activity—contending, for example, that the price system is unfair because it awards goods and services to those who can pay the price, that the market system is actually 'rationing by the purse'. In their view, people who acquire little in the way of goods and services through market activity are forced into lives of hardship. Liberals are, therefore, more concerned than conservatives about the unequal distribution of income produced by market activity and are more likely to propose government policies aimed at redistributing income in a manner that will reduce income inequality.

There is a widespread view that if markets fail in a significant way, there are pressures on the government to correct for the market failure. The other main role of the government is the provision of public goods. Although, as we saw above, a pervasive presence of public goods is taken to be a case of market failure, so that public goods provision can be taken to a part of correcting for market failures, provision of public goods is a very important role for the government to play, as often private firms do not have the incentive to provide public goods. In the absence of the government, there may be an undersupply of public goods.

Let us now discuss some other roles. Apart from the basic functions of the government like providing a legal framework, enforcing contracts and protecting property rights, and also providing public goods and correcting for market failures, the government has to perform certain important functions in developing nations. Since the late 1940s and early 1950s, from the time that many of the developing nations became free of colonial rule and embarked on their independent development trajectory, the government in these developing nations has participated actively in the economy. First, the government has owned several of the firms, and there has been a large public sector, even in India. Several core sectors, Defence production, railways, airlines, atomic energy, and heavy industries have traditionally been with the public sector. There have even been sectors or industries or individual firms and organizations that were not in the public sector to begin with were later nationalized, like some commercial banks in India. Even the industries or sectors that were not directly owned by the government, governments in various nations were involved in economic regulation of these industries. These regulations included price controls, minimum wage laws, laws governing employment conditions and ability of the firm to fire workers. There were regulation and elaborate licensing system to govern setting up of industries or capacity expansion etc. Many countries went in for central planning, with physical targets with regard to growth rates and the

required investment rate. Several other countries that other variations of planning. Thus there was reliance on both central planning as well as, to some extent, on the market, for economic development. Apart from monetary and fiscal policies governments have policies regarding international trade and finance, foreign direct investment, foreign portfolio investment and so on.

In developing nations governments have played an active role in providing minimum needs, in developing programmes for poverty alleviation and employment generation and other social programmes.

Since the 1980s, and in India particularly since 1991 with liberalization, the prevailing view appears to be that the government should be playing a far lesser role in the economy than was considered desirable earlier. Hence the government has been lessening its role in the economy as compared to earlier. The government has moved away from many sectors, there has been disinvestment in public sector enterprises and privatization. Countries have changed in many cases from a fixed to a flexible exchange rate so that governments exercise much lesser influence on the determination of exchange rates. Today the thinking seems to be that the state should only focus on areas where it will be costs for the private sector to step in. It is recognized that the government should lower the amount of its participation in the economy and strive to improve the quality of its activities and services. There is emphasis on good governance, rather than a large amount of government activities.

Check Your Progress 1

1. State the First and the Second Theorems of Welfare Economics

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2. Describe the various types of market failure.

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3. What are the roles of governments in developing countries?

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12.4 GOVERNMENT FAILURE

In sections 12.2 and 12.3 we saw that there are certain situations where the government intervenes in the market to correct market failures. Also, government might itself engage in production and supply of certain goods. Other than this, the government provides administration. In certain societies the government undertakes economic planning. The government undertakes monetary and fiscal policy and incurs expenditures, generates revenues, provides subsidies and transfers, and imposes taxes. Thus, the state performs many functions. But if we limit ourselves to government intervention to correct the malfunctioning of the market, we find that there are situations where the government may not in practice be able to realise its intentions. Very often political factors come into play and the intention of the government gets lost due to political factors.

The classic case for the government to intervene in the working of the market, apart from its role in providing security and ensuring enforcing of contracts between private agents, and its role in distribution, is that of market failure. Market failure is any deviation from conditions of perfect competition, such as externalities, information assumptions, monopolies, or the presence of public goods. The case for government intervention in the economy in these situation as also provision of public goods, is made by neoclassical economists on the grounds that Pareto optimality will not obtain in these cases.

What public choice theorists and some other economists have managed to do is forcefully argue and persuade the profession that merely the existence of externalities does not mean that the government will do a good job, it does not automatically make a care for the government. Governments could be inefficient in provision, could overspend, may not pay heed to cost overruns. The situation where government displays inefficiency in provision has been called government failure.

12.4.1 Meaning of Government Failure

This failure of the government to realise its stated objectives is broadly known as government failure. This concept has been put forward as a counter to those who point out the possibility of market failure. Roughly, the idea is that merely because there is market failure does not mean that the government can step in and make it better. There may be government failure, which might make the situation worse than what it was to begin with. Thus, government failure can mean either that the government fails to realise its objectives, or makes the wrong decisions. There are several reasons that have been suggested about why the government fails to realise its objectives.

The outcome of government failure is suboptimal efficiency conditions and lack of optimal allocation of resources. The social costs may also be high.

12.4.2 Causes of Government Failure

The first reason for government failure is that the government has limited information. One of the advantages of the market system is that it seeks and provides information in a costless manner, unless there are market failures. No state can match the market when it comes to processing information. Moreover, the state sometimes cannot foresee future events and make correct expectations. The government lacks the total information required to solve entirely the coordination problem. The information structure is imperfect. The best solution for this is to decentralise government as much as possible, and make the decision-making process participative.

The second reason put forward for government failure is that the government has limited control over the private sector, over private agents. The government may make decisions that require the citizens to do or not do certain things but the administrative and enforcement costs may be very high. For instance, in cities, the government may lay down rules about the size of extension that can be made to dwellings but these may be flouted with impunity. Also, considerations of democratic politics constrain government actions.

The third reason why there may be government failure is that the government has limited control over the bureaucracy. Usually the legislature creates the Act and law, and the executive may conceive the decisions and actions, but it is the bureaucracy that has to implement these. The executive and elected people's representatives may have limited control over the bureaucracy, as there may be situations of asymmetric information here, and the issue of moral hazard comes in with the government as the principal and the bureaucracy as the agent.

Another reason often put forward for government failure is that there are constraints imposed by the political process. Actions and decisions of the government affect all people but in modern democracies these decisions are made by a small group of people. We have touched upon this point while discussing the second type of reason above. The party or coalition that emerged victorious in the previous election forms the government, and they have the next election to contest.

Why do we observe government failure in developing nations? Many years ago, the Nobel Prize winning economist Gunnar Myrdal had spoken of a 'soft state' to describe the state in developing nations. According to Myrdal, the state is not able to effectively implement its stated policy objectives. There can be several reasons for such widespread phenomenon of this inability to meet stated policy objectives. First, government functionaries, and politicians, may in many cases display a pursuit of self-interest. While pursuit of self-interest is much extolled in economics as we have seen in the previous section, in this case the self-interest of these individuals are at odds with the objectives of the organisation, or the bureau or the executive. This pursuit of self-interest not only leads to venality and corruption, it also leads to sub-optimal results and inefficiency from the

government's as well as from society's point of view. You will read about corruption in the next section.

Yet another reason is that, as we mentioned earlier, electoral pressures sometimes compel governments to take populist measures and undertake policies that do not lead to outcomes that promote efficiency. Naturally this type of situation is likely to take place more on the eve of elections. This may be true of national governments as well as state-level governments. Related to this is an added reason, which is that the government often works with short-run perspective in mind. This is especially true about solutions that the government is trying to find about problems. Trying to find short-term solutions does not bring about structural changes in the economy. This leaves many problems un-addressed.

One more reason for government failure is that government actions that are prompted by some specific policy objective or social goal sometimes lead to disincentive effects so that again, the optimal solution or outcome does not result. For example, the government may be driven by the desire to realise some social objectives but adopts a taxation policy that creates distortions in the economy and lowers revenue.

Finally, there is a reason that is very significant as it exists in democratic societies but is constantly undermining the ideals of democracy. This is that certain special interest groups or pressure groups manage to capture the policymaking process and get policies made that are to their advantage. Special interest political groups like chambers of commerce, rich farmers' groups, professionals always try to influence the making of policies that will suit them. Even when there are regulatory activities of the government to regulate the prices and activities of monopolies, some business groups often take actions that influence the regulatory process itself so that they actually benefit from the regulatory processes as compared to other smaller firms. This is sometimes described in the literature as 'regulatory capture' as we saw in the previous unit.

12.5 CORRUPTION

12.5.1 Concept of Corruption

We have touched upon the idea of government failure leading to corruption. Let us elaborate more on the concept of corruption. While it may be difficult to describe, corruption is generally not difficult to recognize when observed. In most cases, different observers would agree on whether a particular behavior connotes corruption.

Corruption has been defined in many different ways, each lacking in some aspect. A few years ago, the question of definition absorbed a large proportion of the time spent on discussions of corruption. The most popular and simplest definition of corruption is that it is the abuse of public power for private benefit. This is the definition used by the World Bank. From this definition it should not be concluded that corruption cannot exist within private sector activities. Especially in large private enterprises, this

phenomenon clearly exists, as for example in procurement or even in hiring. It also exists in private activities regulated by the government. Sometimes, the abuse of public power is not necessarily for one's private benefit but for the benefit of one's party, class, tribe, friends, family, and so on. In fact, in many countries some of the proceeds of corruption go to finance the activities of the political parties.

Among the economic changes that have taken place in recent years, privatization has been most closely linked with corruption. There is no question that public or state enterprises have been a major source of corruption and especially of political corruption because they have occasionally been used to finance the activities of political parties and to provide jobs to the clienteles of particular political groups.

12.5.2 Causes of Corruption

Corruption is generally connected with the activities of the state and especially with the monopoly and discretionary power of the state. However, some of the least corrupt countries in the world, such as Canada, Denmark, Finland, the Netherlands, and Sweden, have some of the largest public sectors, measured as shares of tax revenue or public spending in gross domestic product. The way the state operates and carries out its functions is far more important than the size of public sector activity measured in the traditional way, to determine the extent of corruption in a nation.

In many countries, and especially in developing countries, the role of the state is often carried out through the use of numerous rules or regulations. In these countries licenses, permits, and authorizations of various sorts are required to engage in many activities. The existence of these regulations and authorizations gives a kind of monopoly power to the officials who must authorize or inspect the activities. These officials may refuse the authorizations or may simply sit on a decision for months or even years. Thus, they can use their public power to extract bribes from those who need the authorizations or permits. In India, for example, the expression "licence raj" referred to the individual who sold permits needed to engage in many forms of economic activities. In some countries, some individuals become middlemen or facilitators for obtaining these permits. The fact that in some cases the regulations are nontransparent or are not even publicly available and that an authorization can be obtained only from a specific office or individual—that is, there is no competition in the granting of these authorizations—gives the bureaucrats a great amount of power and a good opportunity to extract bribes. Corruption can also happen because of nexus and networks between powerful firms and industries and politicians or political parties. The quality of bureaucracy sometimes affects the extent of corruption.

The quality of the bureaucracy varies greatly among countries. In some, public sector jobs give a lot of prestige and status; in others, much less so. Many factors contribute to that quality.

In the real world, relatively few people are punished for acts of corruption, in spite of the extent of the phenomenon. Furthermore, with the exception of a few countries, there seems to be a wide gap between the penalties specified in the laws and regulations and the penalties that are effectively imposed. Generally, effective penalties tend to be more lenient than the statutory ones. The administrative procedures followed before a public employee is punished for acts of corruption are slow and cumbersome. Often legal, political, or administrative impediments prevent the full or quick application of the penalties. All these factors limit the role that penalties actually play in many countries, especially when corruption is partly politically motivated. This attitude brings a toleration for small acts of corruption that can in time encourage bigger acts.

Check Your Progress 2

1. What do you understand by government failure? How is it different from market failure?

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2. What are the main reasons for government failure?

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3. Explain what you understand by corruption. What are the main reasons for corruption?

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12.6 LET US SUM UP

This unit discussed issues of great importance in the trajectory of development of poor countries. We looked at the meaning of market failure and why markets fail. Some of the reasons we studied were imperfections in competition, presence of public goods, externalities and imperfections in information.

Before discussing market failure, the unit had acquainted you with the two fundamental theorems of welfare economics. After discussing market failure the unit suggested that there may be situations where the government tries to correct market failures but is unable in practice to realise its stated objectives. This type of situation is called government failure. Among the reasons for market failure we found were moral hazard, imperfect information, and the limited control the government had over the bureaucracy and implementing agencies.

Before the section on government failure, the unit presented a discussion on the role of governments in developing countries. Other than its role in providing a legal framework and enforcing contracts, we saw that in developing nations the government has a larger role to play, like providing basic needs, reducing poverty, and so on. We also saw that in recent decades the idea has gained ground that governments should play a smaller role than before, and should strive to provide good governance. Finally, the unit discussed the concept of corruption, and tried to provide reasons for its prevalence.

12.7 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

1. See section 12.2
2. See section 12.2
3. See section 12.3

Check Your Progress 2

1. See subsection 12.4.1
2. See subsection 12.4.2
3. See section 12.5

GLOSSARY

- Absolute poverty** : The situation of being unable or only barely able to meet the subsistence essentials of food, clothing, shelter, and basic health care. It is the inability to provide for one's own biological needs of sustenance
- Axioms of Inequality** : axioms are some desirable properties or characteristics which these inequality measures/indexes should possess.
- Asset** : An entity possessing market or exchange value, and forming part of the wealth or property of the owner.
- Capital Augmenting** : If technical change leads to a augmenting of capital goods, it is called capital augmenting change.
- Capital Deepening** : It is an increase in capital intensity, measured by something analogous to the capital stock available per labour hour spent, or the amount of capital available for a worker to use.
- Capital good** : a produced good which is used to produce other goods, a produced means of production.
- Capital - Output Ratio** : The number of units of capital required to produce a unit of output.
- Closed Economy** : An economy which does not engage in any foreign trade.
- Community institution** : Locally evolved institutional arrangements governed by stable communities and buffered from outside forces have sustained resources successfully for centuries.
- Convergence** : The tendency for per capita income (or output) to grow faster in lower-income countries than in higher income countries, so that lower-income countries are "catching up" over time. In the situation where countries are hypothesized to converge not in all cases but *other things being equal* (particularly savings rates, labour force growth, and production technologies), then the term *conditional convergence* is used.

Corruption	: The misuse and abuse of public office for private gain. The appropriation of public resources for private profit and other private purposes through the use and abuse of official power or influence.
Degree of Monopoly	: A measure proposed by Michal Kalecki to look at strength of market power by a monopoly.
Depreciation	: Wear and tear in the use of capital goods (machinery, plant, equipment)
Divergence	: A tendency for per capita income (or output) to grow faster in higher-income countries than in lower-income countries so that the income gap widens across countries over time (as was seen in the two centuries after industrialisation began).
Economic Growth	: It is an increase in the level of output of goods and services that is sustained over a long period of time, measured in terms of value added.
Endogenous	: Something the value of which is determined within the system. In modelling, a variable the value of which is determined by solving the system, and is not taken as given.
Endogenous growth theory	: Economic growth generated by factors within the production process (e.g., increasing returns or induced technological change) that are studied as part of a growth model.
Exogenous	: Something the value of which is given from outside. In modelling, a variable the value of which is not determined by solving the model, but is taken as given.
Extensive growth	: This refers to growth in total output level of an economy.
Factor analysis	: refers to the analysis in which weights is given to various variables (or indicators) according to the importance accorded to it.
Financial repression	: Constraints on investment resulting from the rationing of credit, usually to a few large-scale borrowers, in financial markets where interest rates and hence the supply of savings are below market-determined levels.

Fixed coefficient production function	: A production function where the inputs are used in fixed proportions.
Functional Distribution of Income	: Functional distribution is about the magnitude of returns to different factors of production.
Gini Coefficient	: It is the ratio of the area between the line of equal distribution (diagonal 45° line) and the Lorenz curve divided by the total area of the half-square in which the curve lies.
Golden Age Equilibrium	: A state proposed by Joan Robinson where smooth steady growth taken place and the desired and possible rates of accumulation are equal.
Gross Domestic Product	: Measure of the level of economic activity in an economy's boundaries in a particular time period, normally a year or a quarter.
Growth Accounting	: A method or technique to account for relative contribution of growth of capital, that of labour and that of technology to the overall growth in output.
Growth Accounting Formula	: It is a formula that shows through an equation that states that the growth rate of productivity equals capital's share of income times the growth rate of capital per hours of work plus the growth rate of technology.
Head Count Ratio	: The proportion of the number of people living below the line of poverty in the total population.
Human Development Index	: An index measuring national socio-economic development, based on measures of life expectancy at birth, educational attainment, and adjusted real per capita income.
Income per capita	: National income of a country divided by total population.
Infant mortality rate	: Deaths among children between birth and 1 year of age per 1000 live births.
Institutions	: Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction.

Intensive growth	: This refers to growth in per capita output level in an economy.
Investment	: That part of national income which is spent on the acquisition of capital goods.
Kuznets curve	: A graph representing the relationship between a country's income per capita and its inequality of income distribution. It is an inverted U curve which shows the relationship between the inequality and economic growth.
Labour-augmenting technological progress	: Technological progress that raises the productivity of an existing quantity of labour by general education, on-the-job training programmes, and so on.
Levels of living	: The extent to which a person, family, or a group of people can satisfy their material and spiritual wants. If they are able to afford only a minimum quantity of food, shelter and clothing, their levels of living are said to be very low. If they enjoy a great variety of food, shelter, clothing, and other things, such as good health, education, and leisure, they are enjoying relatively high levels of living.
Literacy	: Ability to read and write.
Levels of living	: The extent to which a person, family, or a group of people can satisfy their material and spiritual wants. If they are able to afford only a minimum quantity of food, shelter and clothing, their levels of living are said to be very low. If they enjoy a great variety of food, shelter, clothing, and other things, such as good health, education, and leisure, they are enjoying relatively high levels of living.
Line of Poverty	: The minimum level of income required to purchase the basic needs of sustenance.
Literacy	: Ability to read and write.
Literacy rate	: The percentage of population aged 15 and above that are able to read and write.
Lorenz curve	: A graph depicting the variance of the size distribution of income from perfect equality. It represents the inequality in a country by using the percentage of population and percentage of total income.

Malnutrition	: A state of ill-health resulting from an inadequate or improper diet, usually measured in terms of average daily protein consumption.
Market failure	: A market's inability to deliver its theoretical benefits due to the existence of market imperfections such as monopoly power, lack of factor mobility, significant externalities, or lack of knowledge. Market failure often provides the justification for government intervention to alter the working of the free market.
Millennium Development Goals (MDGs)	: Precursor to the SDGs adopted by the United Nations in 2000 to: eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat diseases; ensure environmental sustainability; and develop a global development partnership. Goals were assigned targets to be achieved by 2015.
Multidimensional Poverty Index (MPI)	: A poverty measure that identifies the poor using dual cutoffs for levels and numbers of deprivations, and then multiplies the percentage of people living in poverty times the percentage of weighted indicators for which poor households are deprived on average.
National income	: Total money value of all final goods and services produced in an economy during a period of time, usually a year.
Natural Growth Rate	: Refers to the maximum growth rate which an economy can achieve with its available factors of production and resources.
Non-excludable goods	: goods for which it is difficult to charge a price to the user.
Path dependency	: A condition in which the past condition of an individual or economy, measured by the level of one or more variables, affects future conditions.
Per Capita Income	: this is calculated by total gross domestic product of a country divided by total population. Per capita income is often used as an indicator of level of living and development. It can, however, be a biased index because it takes no account of income distribution.

Personal Distribution of Income	: It describes income flows to individuals or households.
Poverty Trap	: The idea that low savings rate and low capital-labour ratio lead to an equilibrium situation where poor nations are trapped in poverty.
Prisoner's Dilemma	: A game where all the individuals choose rational strategies (individually) but those strategies are no good for a collective outcome because the collective outcome turns out to be irrational.
Private property institution	: Rights over the resource are clearly defined which help manage the resources as it makes easier to exercise control.
Public good	: An entity that provides benefits to all individuals simultaneously and whose enjoyment by one person in no way diminishes that of anyone else.
Rate	: Change in the value of a variable with respect to another variable, usually time.
Relative Poverty	: An extreme term of inequality.
Returns to Scale	: The proportion by which output changes, when all inputs are increased by a certain equal amount.
Rival Goods	: Goods, which, when consumed by one person, reduces the amount left over for consumption by other people.
Savings	: That part of national income which is not spent on the purchase of consumer goods.
Social indicators	: Non-economic factors of development, such as, life expectancy at birth, literacy rate, infant mortality rate and doctors per 1000 population.
Solow neoclassical growth model	: Growth model in which there are diminishing returns to each factor of production but constant returns to scale. Exogenous technological change generates long-term economic growth.

Solow Residual	: Solow residual is a measure of the change in total factor productivity in a Solow growth model. This is a way of doing growth accounting. It represents that part of growth in output which is not accounted for by the growth in inputs. The Solow residual is also known as Total Factor Productivity.
State institution	: It is the institution wherein all the decisions are taken by a central authority, generally known as government.
Steady State	: A condition in which the key variables are not changing.
Sustainable Development Goals (SDGs)	: Successor to the earlier Millennium Development Goals (MDGs), a set of 17 broad goals, among them to: end poverty and hunger; ensure healthy lives, quality education, gender equality, water and sanitation, and modern energy; promote inclusive growth, employment, resilient infrastructure, industrialisation, innovation, and improved cities; reduce inequality; combat climate change and environmental damage; and promote peace, justice, and global partnership.
Tragedy of Commons	: A phenomenon which occurs when each individual thinks mainly of his own and not at all about the common interest.
Vicious circle	: A self-reinforcing situation in which factors tend to perpetuate a certain undesirable phenomenon.
Warranted Growth Rate	: Refers to that growth-rate of the economy when it is working at full capacity and making optimum use of machine and manpower.

SOME USEFUL BOOKS

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