Unit 4

What Is Economics, and Why Is It Important?

Economics is one of the most exciting disciplines in social sciences. The word economy comes from the Greek phrase — one who manages a household. The science of economics in its current form is about two hundred years old. Economics is the study of how humans make decisions in the face of scarcity. These can be individual decisions, family decisions, business decisions or societal decisions. If you look around carefully, you will see that scarcity is a fact of life. Scarcity means that human wants for goods, services and resources exceed what is available. Resources, such as labor, tools, land, and raw materials are necessary to produce the goods and services we want but they exist in limited supply. Of course, the ultimate scarce resource is time- everyone, rich or poor, has just 24 expendable hours in the day to earn income to acquire goods and services, for leisure time, or for sleep. At any point in time, there is only a finite amount of resources available.

Think about it this way: In 2015 the labor force in the United States contained over 158 million workers, according to the U.S. Bureau of Labor Statistics. The total land area was 3,794,101 square miles. While these are certainly large numbers, they are not infinite. Because these resources are limited, so are the numbers of goods and services we produce with them. Combine this with the fact that human wants seem to be virtually infinite, and you can see why scarcity is a problem.

There is no universally accepted definition of economics (its definition is controversial). This is because different economists defined economics from different perspectives:

- a. Wealth definition,
- b. Welfare definition,
- c. Scarcity definition, and
- d. Growth definition

Hence, its definition varies as the nature and scope of the subject grow over time. But, the formal and commonly accepted definition is as follow.

Economics is a social science which studies about efficient allocation of scarce resources so as to attain the maximum fulfillment of unlimited human needs. As economics is a science of choice, it studies how people choose to use scarce or limited productive resources (land, labour, equipment, technical knowledge and the like) to produce various commodities.

The following statements are derived from the above definition.

- Economics studies about scarce resources:
- It studies about allocation of resources:
- Allocation should be efficient;

- · Human needs are unlimited
- The aim(objective) of economics is to study how to satisfy the unlimited human needs up to the maximum possible degree by allocating the resources efficiently.

The rationales of economics

There are two fundamental facts that provide the foundation for the field of economics. 1) Human(society_s)material wants are unlimited.

2) Economic resources are limited (scarce).

The **basic economic problem** is about **scarcity** and **choice** since there are only limited amount of resources available to produce the unlimited amount of goods and services we desire. Thus, economics is the study of how human beings make choices to use scarce resources as they seek to satisfy their unlimited wants. Therefore, choice is at the heart of all decision-making. As an individual, family, and nation, we confront difficult choices about how to use limited resources to meet our needs and wants. Economists study how these choices are made in various settings; evaluate the outcomes in terms of criteria such as efficiency, equity, and stability; and search for alternative forms of economic organization that might produce higher living standards or a more desirable distribution of material well-being.

Scope and method of analysis in economics

Scope of economics

The field and scope of economics is expanding rapidly and has come to include a vast range of topics and issues. In the recent past, many new branches of the subject have developed, including development economics, industrial economics, transport economics, welfare economics, environmental economics, and soon. However, the core of modern economics is formed by its two major branches: microeconomics and macroeconomics. That means economics can be analyzed at micro and macro level.

- **A. Microeconomics** is concerned with the economic behavior of individual decision making units such as households, firms, markets and industries. In other words, it deals with how households and firms make decisions and how they interact in specific markets.
- **B.** Macroeconomics is a branch of economics that deals with the effects and consequences of the aggregate behaviour of all decision making units in a certain economy. In other words, it is an aggregative economics that examines the interrelations among various aggregates, their determination and the causes of fluctuations in them. It looks at the economy as a whole and discusses about the economy-wide phenomena.

- Studies individual economic units of an economy.
- Deals with individual income, individual prices, individual outputs, etc.
- Its central problem is price determination and allocation of resources.
- ❖ Its main tools are the demand and supply of particular commodities and factors.
- It helps to solve the central problem of _what, how and for whom to produce_ in an economy so as to maximize profits
- Discusses how the equilibrium of a consumer, a producer or an industry is attained.

Examples: Individual income, individual savings, individual prices, an individual firm_s output, individual consumption, etc.

- Studies an economy as a whole and its aggregates.
- Deals with national income and output and general price level
- ❖ Its central problem is determination of level of income and employment.
- Its main tools are aggregate demand and aggregate supply of an economy as a whole.
- Helps to solve the central problem of _Full employment of resources in the economy'.
- Concerned with the determination of equilibrium levels of income and employment at aggregate level.

Examples: national income, national savings, general price level, national output, aggregate consumption, etc.

Note: Both microeconomics and macroeconomics are complementary to each other. That is, macroeconomics cannot be studied in isolation from microeconomics.

Positive and normative analysis

Economics can be analyzed from two perspectives: positive economics and normative

economics.

Positive economics: it is concerned with analysis of facts and attempts to describe the world as it is. It tries to answer the questions what was; what is; or what will be? It does not judge a system as good or bad, better or worse.

Example:

- The current inflation rate in Ethiopia is 12 percent.
- Poverty and unemployment are the biggest problems in Ethiopia.
- The life expectancy at birth in Ethiopia is rising.

All the above statements are known as positive statements. These statements are all concerned with real facts and information. Any disagreement on positive statements can be checked by looking in to facts.

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Normative economics: It deals with the questions like, what ought to be? Or what the economy should be? It evaluates the desirability of alternative outcomes based on one_s value judgments about what is good or what is bad. In this situation since normative economics is loaded with judgments, what is good for one may not be the case for the other. Normative analysis is a matter of opinion (subjective in nature) which cannot be proved or rejected with reference to facts.

Example:

- The poor should pay no taxes.
- There is a need for intervention of government in the economy.
- Females ought to be given job opportunities.

Any disagreement on a normative statement can be solved by voting.

Inductive and deductive reasoning in economics

The fundamental objective of economics, like any science, is the establishment of valid generalizations about certain aspects of human behaviour. Those generalizations are known as theories. A theory is a simplified picture of reality. Economic theory provides the basis for economic analysis which uses logical reasoning. There are two methods of logical reasoning: inductive and deductive.

a) Inductive reasoning is a logical method of reaching at a correct general state mentor theory based on several independent and specific correct statements. In short, it is the process of deriving a principle or theory by moving from facts to theories and from particular to general economic analysis.

Inductive method involves the following steps.

- 1. Selecting problem for analysis
- 2. Collection, classification, and analysis of data

- 3. Establishing cause and effect relationship between economic phenomena.
- b) Deductive reasoning is a logical way of arriving at a particular or specific correct statement starting from a correct general statement. In short, it deals with conclusions about economic phenomenon from certain fundamental assumptions or truths or axioms through a process of logical arguments. The theory may agree or disagree with the real world and we should check the validity of the theory to facts by moving from general to particular. Major steps in the deductive approach include:
 - 1. Problem identification
 - 2. Specification of the assumptions

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- 3. Formulating hypotheses
- 4. Testing the validity of the hypotheses

Scarcity, choice, opportunity cost and production possibilities frontier

It is often said that the central purpose of economic activity is the production of goods and services to satisfy consumer's needs and wants i.e. to meet people's need for consumption both as a means of survival and also to meet their ever-growing demand for an improved life style or standard of living.

1. Scarcity

The fundamental economic problem that any human society faces is the problem of scarcity. Scarcity refers to the fact that all economic resources that a society needs to produce goods and services are finite or limited in supply. But their being limited should be expressed in relation to human wants. Thus, the term scarcity reflects the imbalance between our wants and the means to satisfy those wants.

The following are examples of *scarce resources*.

All types of human resources: manual, intellectual, skilled and specialized labor; Most natural resources like land(especially,fertileland), minerals, cleanwater, forests and wild - animals;

All types of capital resources(like machines, intermediate goods, infrastructure); and All types of entrepreneurial resources.

Economic resources are usually classified into four categories.

- Labour: refers to the physical as well as mental efforts of human beings in the production and distribution of goods and services. The reward for labour is called wage.
- Land: refers to the natural resources or all the free gifts of nature usable in the production of goods and services. The reward for the services of land is known as **rent**.

- Capital: refers to all the manufactured inputs that can be used to produce other goods and services. Example: equipment, machinery, transport and communication facilities, etc. The reward for the services of capital is called **interest.**
- Entrepreneurship: refers to a special type of human talent that helps to organize and manage other factors of production to produce goods and services and takes risk of making loses. The reward for entrepreneurship is called **profit.**

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Resources

Free resources: A resource is said to be free if the amount available to a society is greater than the amount people desire at zero price. E.g. sun shine

Scarce (economic) resources: A resource is said to be scarce or economic resource when the amount available to a society is less than what people want to have at zero price.

Entrepreneurs are individuals who:

- Organize factors of production to produce goods and services.
- Make basic business policy decisions.
- Introduce new inventions and technologies into business practice.
- Look for new business opportunities.
- Take risks of making losses.

Note: *Scarcity does not mean shortage.* We have already said that a good is said to be scarce if the amount available is less than the amount people wish to have at zero price. But we say that there is shortage of goods and services when people are unable to get the amount they want at the prevailing or on going price. Shortage is a specific and short term problem but scarcity is a universal and everlasting problem.

2. Choice

If resources are scarce, then output will be limited. If output is limited, then we cannot satisfy all of our wants. Thus, choice must be made. Due to the problem of scarcity, individuals, firms

and government are forced to choose as to what output to produce, in what quantity, and what output not to produce. In short, scarcity implies choice. Choice, in turn, implies cost. That means whenever choice is made, an alternative opportunity is sacrificed. This cost is known as opportunity cost.

3. Opportunity cost

In a world of scarcity, a decision to havemore of onething, at the same time, means adecision to have less of another thing. The value of the next best alternative that must be sacrificed is, therefore, the opportunity cost of the decision.

Definition: Opportunity cost is the amount or value of the next best alternative that must be sacrificed (forgone) in order to obtain one more unit of a product.

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For example, suppose the country spends all of its limited resources on the production of cloth or computer. If a given amount of resources can produce either one meter of cloth or 20 units of computer, then the cost of one meter of cloth is the 20 units of computer that must be sacrificed in order to produce a meter of cloth.

When we say opportunity cost, we mean that:

- ✓ It is measured in goods & services but not in money costs
- ✓ It should be inline with the principle of substitution.

In conclusion, when opportunity cost of an activity increases people substitute other activities in its place.

Microeconomics and Macroeconomics

Economics acknowledges that production of useful goods and services can create problems of environmental pollution. It explores the question of how investing in education helps to develop workers' skills. It probes questions like how to tell when big businesses or big labor unions are operating in a way that benefits society as a whole and when they are operating in a way that benefits their owners or members at the expense of others. It looks at how government spending, taxes, and regulations affect decisions about production and consumption.

It should be clear by now that economics covers considerable ground. We can divide that ground into two parts: Microeconomics focuses on the actions of individual agents within the economy, like households, workers, and businesses. Macroeconomics looks at the economy as a whole. It focuses on broad issues such as growth of production, the number of unemployed people, the inflationary increase in prices, government deficits, and levels of exports and imports. Microeconomics and

macroeconomics are not separate subjects, but rather complementary perspectives on the overall subject of the economy.

To understand why both microeconomic and macroeconomic perspectives are useful, consider the problem of studying a biological ecosystem like a lake. One person who sets out to study the lake might focus on specific topics: certain kinds of algae or plant life; the characteristics of particular fish or snails; or the trees surrounding the lake. Another person might take an overall view and instead consider the lake's ecosystem from top to bottom; what eats what, how the system stays in a rough balance, and what environmental stresses affect this balance. Both approaches are useful, and both examine the same lake, but the viewpoints are different. In a similar way, both microeconomics and macroeconomics study the same economy, but each has a different viewpoint.

Whether you are scrutinizing lakes or economics, the micro and the macro insights should blend with each other. In studying a lake, the micro insights about particular plants and animals help to understand the overall food chain, while the macro insights about the overall food chain help to explain the environment in which individual plants and animals live.

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In economics, the micro decisions of individual businesses are influenced by whether the macroeconomy is healthy. For example, firms will be more likely to hire workers if the overall economy is growing. In turn, macroeconomy's performance ultimately depends on the microeconomic decisions that individual households and businesses make.

Microeconomics

What determines how households and individuals spend their budgets? What combination of goods and services will best fit their needs and wants, given the budget they have to spend? How do people decide whether to work, and if so, whether to work full time or part time? How do people decide how much to save for the future, or whether they should borrow to spend beyond their current means?

What determines the products, and how many of each, a firm will produce and sell? What determines the prices a firm will charge? What determines how a firm will produce its products? What determines how many workers it will hire? How will a firm finance its business? When will a firm decide to expand, downsize, or even close? In the microeconomics part of this book, we will learn about the theory of consumer behavior, the theory of the firm, how markets for labor and other resources work, and how markets sometimes fail to work properly.

Macroeconomics

What determines the level of economic activity in a society? In other words, what determines how many goods and services a nation actually produces? What determines how many jobs are available in an economy? What determines a nation's standard of living? What causes the economy to speed up or

slow down? What causes firms to hire more workers or to lay them off? Finally, what causes the economy to grow over the long term?

We can determine an economy's macroeconomic health by examining a number of goals: growth in the standard of living, low unemployment, and low inflation, to name the most important. How can we use government macroeconomic policy to pursue these goals? A nation's central bank conducts monetary policy, which involves policies that affect bank lending, interest rates, and financial capital markets. For the United States, this is the Federal Reserve. A nation's legislative body determines fiscal policy, which involves government spending and taxes. For the United States, this is the Congress and the executive branch, which originates the federal budget. These are the government's main tools. Americans tend to expect that government can fix whatever economic problems we encounter, but to what extent is that expectation realistic?

How Economists Use Theories and Models to Understand Economic Issues

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John Maynard Keynes (1883–1946), one of the greatest economists of the twentieth century, pointed out that economics is not just a subject area but also a way of thinking. Keynes famously wrote in the introduction to a fellow economist's book: —[Economics] is a method rather than a doctrine, an apparatus of the mind, a technique of thinking, which helps its possessor to draw correct conclusions. In other words, economics teaches you how to think, not what to think.

Economists see the world through a different lens than anthropologists, biologists, classicists, or practitioners of any other discipline. They analyze issues and problems using economic theories that are based on particular assumptions about human behavior. These assumptions tend to be different than the assumptions an anthropologist or psychologist might use. A theory is a simplified representation of how two or more variables interact with each other. The purpose of a theory is to take a complex, real world issue and simplify it down to its essentials. If done well, this enables the analyst to understand the issue and any problems around it. A good theory is simple enough to understand, while complex enough to capture the key features of the object or situation you are studying.

Sometimes economists use the term **model** instead of theory. Strictly speaking, a theory is a more abstract representation, while a model is a more applied or empirical representation. We use models to test theories, but for this course we will use the terms interchangeably.

For example, an architect who is planning a major office building will often build a physical model that sits on a tabletop to show how the entire city block will look after the new building is constructed. Companies often build models of their new products, which are more rough and unfinished than the final product, but can still demonstrate how the new product will work.

A good model to start with in economics is the circular flow diagram (Figure 1.6). It pictures the economy as consisting of two groups—households and firms—that interact in two markets: the goods and services market in which firms sell and households buy and the labor market in which households

sell labor to business firms or other employees.

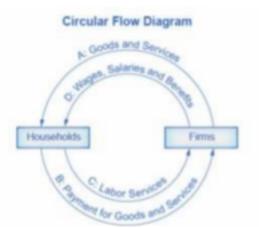


Figure 1.6 The Circular Flow Diagram The circular flow diagram shows how households and firms interact in the goods and services market, and in the labor market. The direction of the arrows shows that in the goods and services market, households receive goods and services and pay firms for them. In the labor market, households provide labor and receive payment from firms through wages, salaries, and benefits.

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Firms produce and sell goods and services to households in the market for goods and services (or product market). Arrow —All indicates this. Households pay for goods and services, which becomes the revenues to firms. Arrow —Bll indicates this. Arrows A and B represent the two sides of the product market. Where do households obtain the income to buy goods and services? They provide the labor and other resources (e.g. land, capital, raw materials) firms need to produce goods and services in the market for inputs (or factors of production). Arrow —Cll indicates this. In return, firms pay for the inputs (or resources) they use in the form of wages and other factor payments. Arrow —Dll indicates this. Arrows —Cll and —Dll represent the two sides of the factor market.

Of course, in the real world, there are many different markets for goods and services and markets for many different types of labor. The circular flow diagram simplifies this to make the picture easier to grasp. In the diagram, firms produce goods and services, which they sell to households in return for revenues. The outer circle shows this, and represents the two sides of the product market (for example, the market for goods and services) in which households demand and firms supply. Households sell their labor as workers to firms in return for wages, salaries, and benefits. The inner circle shows this and represents the two sides of the labor market in which households supply and firms demand.

This version of the circular flow model is stripped down to the essentials, but it has enough features to explain how the product and labor markets work in the economy. We could easily add details to this basic model if we wanted to introduce more real-world elements, like financial markets, governments, and interactions with the rest of the globe (imports and exports).

Economists carry a set of theories in their heads like a carpenter carries around a toolkit. When they see an economic issue or problem, they go through the theories they know to see if they can find one that fits. Then they use the theory to derive insights about the issue or problem. Economists express theories as diagrams, graphs, or even as mathematical equations. (Do not worry. In this course, we will mostly use graphs.) Economists do not figure out the answer to the problem first and then draw the graph to illustrate. Rather, they use the graph of the theory to help them figure out the answer. Although at the introductory level, you can sometimes figure out the right answer without applying a model, if you keep studying economics, before too long you will run into issues and problems that you will need to graph to solve. We explain both micro and macroeconomics in terms of theories and models. The most well-known theories are probably those of supply and demand, but you will learn a number of others.

Economic systems

The way a society tries to answer the above fundamental questions is summarized by a concept known as economic system. An **economic system** is a set of organizational and institutional arrangements established to answer the basic economic questions. Customarily, we can identify three types of economic system. These are capitalism, command and mixed economy.

Capitalist economy

Capitalism is the oldest formal economic system in the world. It became widespread in the middle of the 19th century. In this economic system, all means of production are privately owned, and production takes place at the initiative of individual private entrepreneurs who work mainly for private profit. Government intervention in the economy is minimal. This

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system is also called *free market economy* or *market system* or *laissez faire*.

Features of Capitalistic Economy

- ✓ The right to private property: The right to private property a fundamental feature of a capitalist economy. As part of that principle, economic or productive factors such as land, factories, machinery, mines etc. are under private ownership.
- ✓ Freedom of choice by consumers: Consumers can buy the goods and services that suit their tastes and preferences. Producers produce goods in accordance with the wishes of the consumers. This is known as the principle of consumer sovereignty.
- ✔ Profit motive: Entrepreneurs, in their productive activity, are guided by the motive of profit-making.
- ✓ Competition: In a capitalist economy, competition exists among sellers or producers of similar goods to attract customers. Among buyers, there is competition to obtain goods. Among workers, the competition is to get jobs. Among employers, it is to get workers and investment funds.
- ✓ Price mechanism: All basic economic problems are solved through the price mechanism.
- ✓ Minor role of government: The government does not interfere in day-to-day economic activities and confines itself to defense and maintenance of law and order.
- ✓ Self-interest: Each individual is guided by self-interest and motivated by the desire for economic gain.
- ✓ Inequalities of income: There is a wide economic gap between the rich and the poor. ✓ Existence of negative externalities: A negative externality is the harm, cost, or inconvenience suffered by a third party because of actions by others. In capitalistic economy, decision of firms may result in negative externalities against another firm or society in general.

Advantages of Capitalistic Economy

- **Flexibility or adaptability:** It successfully adapts itself to changing environments.
- ❖ Decentralization of economic power: Market mechanisms work as a decentralizing force against the concentration of economic power.
- ❖ Increase in per-capitain come and standard of living: Rapid growth in levels of production and income leads to higher per-capita income and standards of living. ❖ New types of consumer goods: Varieties of new consumer goods are developed and produced at large scale.
- **Growth of entrepreneurship:** Profit motive creates and supports new entrepreneurial skills and approaches.
- Optimum utilization of productive resources: Full utilization of productive resources
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 is possible due to innovations and technological progress.
- **High rate of capital formation:** The right to private property helps in capital formation.

Disadvantages of Capitalistic Economy

- **❖ Inequality of income:** Capitalism promotes economic inequalities and creates social imbalance.
- ❖ Unbalanced economic activity: As there is no check on the economic system, the economy can develop in an unbalanced way in terms of different geographic regions and different sections of society.
- **Exploitation of labour:** In a capitalistic economy, exploitation of labour(for example by paying low wages) is common.
- ❖ Negative externalities: are problems in capitalistic economy where profit maximization is the main objective of firms. If economic makes sense for a firm to force others to pay the impacts of negative externalities such as pollution.

Command economy

Command economy is also known as socialistic economy. Under this economic system, the economic institutions that are engaged in production and distribution are owned and controlled by the state. In the recent past, socialism has lost its popularity and most of the socialist countries are trying free market economies.

- ✓ Collective ownership: All means of production are owned by the society as a whole, and there is no right to private property.
- ✓ Central economic planning: Planning for resource allocation is performed by the controlling authority according to given socio-economic goals.
- ✓ Strong government role: Government has complete control over all economic activities.
- ✓ Maximum social welfare: Command economy aims at maximizing social welfare and does not allow the exploitation of labour.
- ✓ Relative equality of incomes: Private property does not exist in a command economy, the profit motive is absent, and there are no opportunities for accumulation of wealth. All these factors lead to greater equality in income distribution, in comparison with capitalism.

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Advantages of Command Economy

- **♦ Absence of wasteful competition:** There is no place for wasteful use of productive resources through unhealthy competition.
- ❖ Balanced economic growth: Allocation of resources through centralized planning leads to balanced economic development. Different regions and different sectors of the economy can develop equally.
- ❖ Elimination of private monopolies and inequalities: Command economies avoid the major evils of capitalism such as inequality of income and wealth, private monopolies, and concentration of economic, political and social power.

Disadvantages of Command Economy

- **♦ Absence of automatic price determination:** Since all economic activities are controlled by the government, there is no automatic price mechanism.
- ❖ Absence of incentives for hard work and efficiency: The entire system depends on bureaucrats who are considered inefficient in running businesses. There is no financial incentive for hard work and efficiency. The economy grows at a relatively slow rate.
- **♦ Lack of economic freedom:** Economic freedom for consumers, producers, investors, and employers is totally absent, and all economic powers are concentrated in the hands of the government.
- **❖ Red-tapism:** it is widely prevalent in a command economy because all decisions are made by government officials.

Mixed economy

A mixed economy is an attempt to combine the advantages of both the capitalistic economyand the command economy. It incorporates of the features of both and allows private and public sectors to co-exist.

Main Features of Mixed Economy

- ✓ Co-existence of public and private sectors: Public and private sectors co-exist in this system. Their respective roles and aims are well-defined. Industries of national and strategic importance, such as heavy and basic industry, defense production, power generation, etc. are set up in the public sector, whereas consumer-goods industry and small-scale industry are developed through the private sector.
- ✓ Economic welfare: Economic welfare is the most important criterion of the success of a mixed economy. The public sector tries to remove regional imbalances, provides large employment opportunities and seeks economic welfare through its price policy.

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Government control over the private sector leads to economic welfare of society at large.

- ✓ Economic planning: The government uses instruments of economic planning to achieve co-ordinated rapid economic development, making use of both the private and the public sector.
- ✔ Price mechanism: The price mechanism operates for goods produced in the private sector, but not for essential commodities and goods produced in the public sector. Those prices are defined and regulated by the government.
- ✓ Economic equality: Private property is allowed, but rules exist to prevent concentration of wealth. Limits are fixed for owning land and property. Progressive taxation, concessions and subsides are implemented to achieve economic equality.

Advantages of Mixed Economy

- ❖ Private property, profit motive and price mechanism: All the advantages of a capitalistic economy, such as the right to private property, motivation through the profit motive, and control of economic activity through the price mechanism, are available in a mixed economy. At the same time, government control ensures that they do not lead to exploitation.
- ❖ Adequate freedom: Mixed economies allow adequate freedom to different economic units such as consumers, employees, producers, and investors.
- * Rapid and planned economic development: Planned economic growth takes place, resources are properly and efficiently utilized, and fast economic development takes place because the private and public sector complement each other.

❖ Social welfare and fewer economic inequalities: The government_s restricted control over economic activities helps in achieving social welfare and economic equality.

Disadvantages of Mixed Economy

- ❖ Ineffectiveness and inefficiency: A mixed economy might not actually have the usual advantages of either the public sector or the private sector. The public sector might be inefficient due to lack of incentive and responsibility, and the private sector might be made ineffective by government regulation and control.
- **Economic fluctuations:** If the private sector is not properly controlled by the government, economic fluctuations and unemployment can occur.
- ❖ Corruption and black markets:if government policies, rules and directives are not effectively implemented, the economy can be vulnerable to increased corruption and black market activities.