

Business Economics

UNIT – I

Syllabus of Unit- I

Introduction: Economics and Business Economics– Meaning, Nature, concept & Scope of Business economics. Basic problem of an Economy and Role of price Mechanism – Basic problems of an economy, Classification of Economy, Its features, advantages and disadvantages. Free Enterprise Economy: Meaning & Features.

Theory of utility : Theory of Consumer Behavior – Nature of Human wants, Utility Analysis - Meaning and definition of utility, Concepts of Marginal Utility, Total Utility, Cardinal and ordinal approach of utility(Difference), Features of Utility, Law of diminishing Marginal utility.

What Is Economics?

Economics is a social science concerned with the production, distribution, and consumption of goods and services. It studies how individuals, businesses, governments, and nations make choices about how to allocate resources. Economics focuses on the actions of human beings, based on assumptions that humans act with rational behavior, seeking the most optimal level of benefit or utility. The building blocks of economics are the studies of labor and trade. Since there are many possible applications of human labor and many different ways to acquire resources, it is the task of economics to determine which methods yield the best results.

Meaning of Business Economics

In life, everyone wants an infinite number of things but we only have finite resources to acquire what we want. Maintaining an efficient balance between these unlimited wants and limited resources is what Business Economics deals with. Therefore, understanding the Meaning of Business Economics is extremely crucial. But when we are talking about business economics we consider the needs of a bigger entity, for example, a nation, a firm, etc.

To understand the meaning of business economics we can think of Business Economics as the integration of two major concepts: Economic Theory + Business Practices. It helps in making the best decision based on the analytical tools of Economic Theory and best-suited Business Policies defined within Business Practices.

Nature of Business Economics

For a layman, the economic world is a complex place. Usually, economic theories are simple and hypothetical in nature. Hence, most managers find a difference between the propositions of these theories and the real economic world. This is where Business Economics steps in. It enables the application of economic logic and analytical tools and attempts to bridge the gap between theory and practice. In this article, we will describe the nature of business economics to help understand the economic theories better.

Before we start to study the nature of business economics, it is important to understand that economics is broadly divided into two major parts:

- Micro Economics
- Macro Economics

Micro Economics

This is the study of the way individual units make decisions regarding the efficient allocation of their scarce resources. Also, these individual units are consumers or firms.

In microeconomics, the focus is on a small number of units rather than all units combined. Further, it does not give us a picture of the happenings in the wider economic environment. The study includes:

- Product pricing;
- Consumer behavior;
- Factor pricing;
- The economic conditions of a section of people;
- The behavior of firms; and
- Location of the industry.

Macro Economics

This is the study of the behavior of large economic aggregates like overall output levels, total consumption, etc. The study also includes the shift of these aggregates over time. Therefore, macroeconomics analyzes the overall economic conditions which are an overall effect of millions of decisions made by different firms and consumers.

- National Income and National Output;
- The general price level and interest rates;
- A balance of trade and balance of payments;
- The external value of currency;
- The overall level of savings and investment; and
- Level of employment and rate of economic growth.

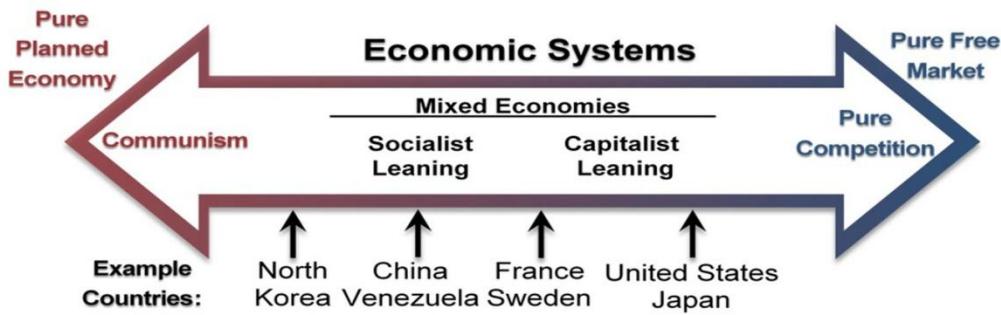
Some Other Types of Economy

Capitalist Economy

Capitalism is the most prominent in our current global economic system. Its main characteristic is that it most means of production and property are privately owned by individuals and companies. The government has a limited role in such an economy limited to management and control measures.

So a capitalist economy is a liberal economy. This means only the free market will determine the supply, demand, and prices of the products. There is no direct government intervention other than to control monopolistic practices in the economy.

As we said earlier a capitalist economy is the most predominant in the current global economy. USA, UK, Germany, Japan, Singapore all are classic examples of capitalist economies.



Features of a Capitalist Economy

- Right to Private Property:** This is the essence of capitalism. This right means that private property such as property, factories, machines, plants etc. can be owned under private individuals and companies. The three things covered under this right are: Every individual can acquire any amount of property, He can use these properties as he wishes, He also has the right of inheritance. So he can inherit the property from his forefathers. And he can also pass it on to his successors on his death.
- Price Mechanism:** Price mechanism is like an invisible hand that controls the workings of a capitalist economy. The forces of supply and demand will determine the prices and the level of productions in the economy. The government will not have any interference in this matter.
- Profit Motive:** The driving force behind any capitalist economy is the profit motive. All companies wish to produce and sell their products to maximize their profits. This also induces healthy competition in the economy.
- Freedom of Enterprise:** In capitalism, every individual is free to make his own economic choices without any intervention. This includes both the consumer and the producers. So a producer is free to produce any goods or services. And the consumer is free to buy whatever he desires and from whomever, he wants without restrictions.

Merits of a Capitalist Economy

- The producers are more incentivized to produce their best goods and services due to the feature of the profit motive and the ability to hold private property.
- The economic growth of an economy is also faster and higher in a capitalist economy. This is because the investors will also invest in projects that are profitable for them. There is no pressure to produce any goods or services if they do not wish to do so for the sake of the public.
- Since all resources and factors of production are under private ownership they are used in the most productive manner. This results in optimum utilization of resources,
- Consumers also benefit in a capitalist economy. Firstly they have the freedom to choose whichever products or services they wish to buy. Also, the competition is high and the producers are motivated to make their best products in large quantities at reasonable prices.
- Capitalism also promotes fundamental rights of freedom and choice for both the consumer and the producers
- In a capitalist economy, there is an incentive for technological and R&D development.
- We can expect a higher degree of efficiency and innovation in a capitalist economy than any other economy.

Solved Question on Capitalist Economy

Q: Describe certain disadvantages of a capitalist economy.

Ans: There are some distinct demerits of a capitalist economy, some of which are

- Can cause a great economic inequality which can lead to social injustice. In a capitalist economy, the gap between the rich and the poor just gets bigger.
- Property rights are given precedence over the rights and the well beings of humans
- There can be a misallocation of resources. This can lead to higher production of luxury goods which will, in turn, make the necessities even more expensive and out of reach for a part of the population.
- Firms tend to spend large amounts on promotion and selling expenses. This is a waste of valuable resources.

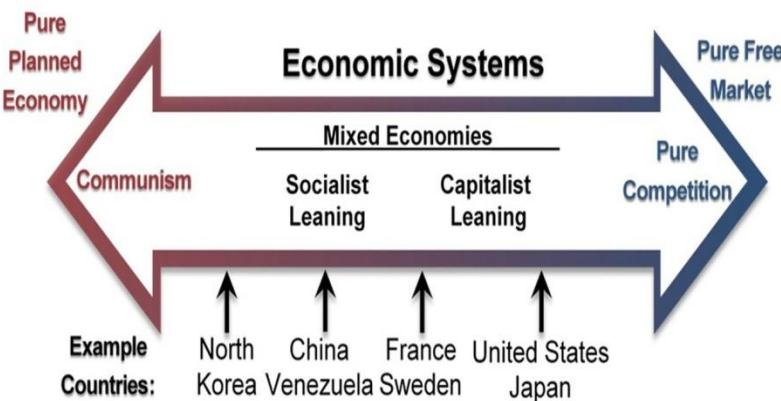
Socialist Economy

In a socialist economy, the setup is exactly opposite to that of a capitalist economy. In such an economy the factors of production are all state-owned. So all the factories, machinery, plants, capital, etc. is owned by a community in control of the State.

All citizens get the benefits from the production of goods and services on the basis of equal rights. Hence this type of economy is also known as the Command Economy.

So basically in a socialist economy, private companies or individuals are not allowed to freely manufacture the goods and services. And the production occurs according to the needs of the society and at the command of the State or the Planning Authorities. The market and the factors of supply and demand will play no role here.

The ultimate aim of a socialist economy is to ensure the maximization of wealth of a whole community, a whole country. It aims to have an equal distribution of wealth amongst all its citizens, not just the welfare of its richest companies and individuals.



Features of a Socialist Economy

1] Collective Ownership of Resources

In a socialist economy, the entire foundation is based on socio-economic objectives. The welfare of the people takes precedence over the profit motive. And so all major factors and resources of production are in the ownership of the state itself. Only small farms and trading firms are kept under private ownership.

2] Central Economic Planning

In a socialist economy, there is always a central planning committee. This is the authority who will decide what is to be produced using the state resources. They will also decide the quantity and the method of production. The ultimate aim of such authority is to fulfill the socio-economic aims of the State.

3] No Choice for Consumers

Every coin has two sides. So in a socialist economy, every citizen is guaranteed basic goods like food, clothing, shelter, etc. But the consumers do not have absolute freedom of choice. They cannot demand the products they wish, they must choose from the products the state manufactures.

Since there is no free market, there is no concept of preference or demand and supply. Also while every citizen will get work, he is not able to freely choose his occupation.

4] Equal Distribution of Income

This is one of the main features of a socialist economy. The setup does not allow one person to accumulate a lot of wealth. So the gap between the rich and the poor is much narrower. And all their citizens enjoy equal opportunities and facilities like education, public healthcare, etc. So there is no discrimination between different classes of people.

5] Absence of Market Forces

The motive here is the welfare of the people. Since there is no profit motive price mechanism will not influence any product decisions. The pricing structure in a socialist economy is 'administered pricing' which is set by the planning commission on the basis of their socio-economic objectives.

Demerits of a Socialist Economy

- Socialism is a breeding ground for corruption, red-tapism, and favouritism. The State and the Central Planning Authority hold too much of the power which they often abuse for their personal gains.
- It essentially restricts the freedom of its citizens. They do not have a choice in the products they wish to buy, or the jobs they want to do. Their freedom is further curtailed by the inability to own any private property.
- Every citizen has the guarantee of a job. So socialism does not promote hard work or any creativity in its citizens.
- Administered prices are not the most efficient. They are not based on market forces. Thus the economic and scientific allocation of resources is impossible in this system.
- Sometimes under socialism, we end up creating state monopolies which can get very dangerous with time.

Solved Questions on Socialist Economy

Q: State some of the advantages of a socialist economy?

Ans: A socialist economy does have certain advantages like,

- Promotes the equitable distribution of wealth and social justice
- It minimizes unemployment
- Ensures that all citizens have the means to achieve a minimum living standard
- It provides comprehensive social security to all its members

Mixed Economy

As the name suggests a mixed economy is the golden combination of a command economy and a market economy. So it follows both price mechanism and central economic planning and oversight.

The means of production are held by both private companies and public or State ownership. And while market forces decide the price, demand, supply, etc there is some government oversight to prevent monopolization and discrimination.

The idea behind a Mixed Economy is to tackle the demerits of both a capitalist economy and a socialist economy and come up with a unique system. It appreciates the concept and the freedom of private ownership of properties and resources.

But at the same time, it understands the disadvantage of unchecked capitalism. Hence it proposes government oversight and economic planning so there is no discrimination against the poorest citizens.

Features of Mixed Economy

- **Coexistence of All Sectors:** In a mixed economy all three sectors coexist in harmony, i.e. private sector, public sector, and joint sector. The joint sector is jointly run by the government and private companies, with at least 51% ownership belonging to the state.
- **Cooperative Sector:** In a mixed economy another sector exists, the cooperative sector. The main aim of the formation of this sector is so that the government can provide financial assistance to cooperative societies involved in warehousing, agricultural, dairy industry, etc.
- **Freedom and Control:** Here all individuals have the freedom to produce goods and products, hold property, choose their occupation and choose or demand products/services they want. But to keep a check on monopolistic practices and discrimination of the lower sectors of society the state maintains some control.
- **Economic Planning:** In a mixed economy we have a central planning authority. All sectors of the economy follow the economic plan of the state to achieve various targets and goals. The plan is not rigid but more of a general guideline for economic growth and prosperity of the nation.
- **Social Welfare:** One of the main aims of a mixed economy is social welfare. It aims to reduce the wealth gap in the country and fight the inequalities of our society. The aim is to reduce poverty and unemployment. And at the same time also improve social security, public health care, public education system, etc.

Merits of a Mixed Economy

- Freedom the citizens enjoy. Especially the economic freedom to ownership of property and choice of goods and services.
- Ownership and existence of private producers also increase capital formation in the country. There is an incentive to do better and innovate as well.
- Price mechanism prevails. So the allocation of resources is more scientific and beneficial to the economy.
- Also enjoys the advantages of central economic planning. This will help the economy grow rapidly and in the correct direction.
- There is healthy competition in the market. There is no cut-throat competition and adverse tactics due to government oversight. Also, there is no absolute lack of competition which is disadvantageous,

Solved Example on Mixed Economy

Q: Which of the following systems does India follow?

- Command
- Market
- Mixed
- None of the above

Ans: The correct option is C. India is a mixed economy. Here all the sectors (private, public, joint) exist in the economy. We have central economic planning in India as well as the practices of free market and price mechanism.

Nature of Business Economics

Business Economics is a Science

What is Science? It is simply a systematic body of knowledge which can establish a relationship between cause and effect. Further, Mathematics, Statistics, and Econometrics are decision sciences.

Business Economics integrates these decision sciences with Economic Theory to arrive at strategies to help businesses achieve their goals. Hence, it follows scientific methods and also tests the validity of the results. This is one aspect of the nature of business economics.

It is Based on Micro Economics

We understand the basic difference between micro and macroeconomics. A business manager is certainly more concerned about achieving the objectives of his own organization. After all, this helps him in ensuring profits and long-term survival of the firm.

Business Economics is more concerned with the decision-making situations of individual establishments. Therefore, it depends on the techniques of Microeconomics.

It Incorporates Elements of Macro Analysis

Even though all businesses focus on their profitability and survival, a firm cannot operate in a vacuum. The external environment of the economy like income and employment levels in the economy, tax policies, etc., affects the firm. All these external factors are components of Macroeconomy.

Therefore, a business manager has to take all such factors into consideration which may influence his business environment.

It is an Art

Business Economics is an art as it requires the practical application of rules and principle to achieve set objectives.

Use of Theory of Markets and Private Enterprises

Business Economics primarily uses the theory of markets and private enterprises. It uses the theory of the firm and resource allocation in a private enterprise economy.

Pragmatic in Approach

Microeconomics is purely theoretical and analyzes economic occurrences under unrealistic assumptions. On the other hand, Business Economics is pragmatic in its approach. It tries to solve the problems which the firms face in the real world.

Interdisciplinary

Business Economics incorporates tools from many other disciplines like mathematics, statistics, accounting, marketing, etc. Therefore, is in interdisciplinary in nature.

Normative

Broadly speaking, Economic Theory has evolved along two lines – Positive and Normative.

A positive or pure science analyzes the cause and effect relationship between variables in a scientific manner. However, it does not involve any value judgment. In simpler words, it describes the economic behavior of individuals or society without focusing on the desirability of such behavior.

On the other hand, normative science involves value judgments. It suggests a course of action under the given circumstances.

Usually, Business Economics is normative in nature. It offers suggestions for the application of economic principles while forming policies, making decisions, and planning for the future. However, firms must understand their environment thoroughly to establish decision rules. This requires the study of positive economic theory.

Therefore, we can say that Business Economics combines the essentials of both the theories while keeping more emphasis on the normative economic theory.

Q1. What is a normative economic theory?

Answer: A normative economic theory takes real-life situations into consideration and suggests policies to improve the economic welfare of the firm. Normative means relating to an ideal or standard and based on what is considered to be a normal way of doing things. In other words, it offers suggestions for the application of economic principles while forming policies, making decisions, and planning for the future.

While the positive economic theory describes the economic world as it is, the normative theory offers suggestions to improve it. In Business Economics, both positive and normative theories are used. However, more emphasis is laid on the latter.

Scope of Business Economics

Business Economics covers most of the problems that a manager or establishment faces. Hence, the scope of business economics is wide. Since a firm can face internal/operational as well as external and/or environmental issues, there are different economic theories applicable to them. Microeconomics helps with internal or operational issues whereas macroeconomics is applied to external or environmental issues. In this article, we will look at the scope of business economics under both these heads.

The Scope of Business Economics

I. Microeconomics Applied to Operational Issues

As the name suggests, internal or operational issues are issues that arise within a firm and are within the control of the management. It is within the scope of business economics to analyze this.

Further, a few examples of such issues are choice of business, size of business, product designs, pricing, promotion for sales, technology choice, etc. Most firms can deal with these using the following microeconomics theories:

1. Analyzing Demand and Forecasting

Analyzing demand is all about understanding buyer behavior. It studies the preferences of consumers along with the effects of changes in the determinants of demand. Also, these determinants include the price of the good, consumer's income, tastes/ preferences, etc.

Forecasting demand is a technique used to predict the future demand for a good and/or service. Further, this prediction is based on the past behavior of factors which affect the demand. This is important for firms as accurate predictions help them produce the required quantities of goods at the right time.

Further, it gives them enough time to arrange various factors of production in advance like raw materials, labor, equipment, etc. Business Economics offers scientific tools which assist in forecasting demand.

2. Production and Cost Analysis

A business economist has the following responsibilities with regards to the production:

- Decide on the optimum size of output based on the objectives of the firm.
- Also, ensure that the firm does not incur any undue costs.

By production analysis, the firm can choose the appropriate technology offering a technically efficient way of producing the output. Cost analysis, on the other hand, enables the firm to identify the behavior of costs when factors like output, time period, and the size of plant change. Further, by using both these analyses, a firm can maximize profits by producing optimum output at the least possible cost.

3. Inventory Management

Firms can use certain rules to reduce costs associated with maintaining inventory in the form of raw materials, work in progress, and finished goods. Further, it is important to understand that the inventory policies affect the profitability of a firm. Hence, economists use methods like the ABC analysis and mathematical models to help the firm in maintaining an optimum stock of inventories.

4. Market Structure and Pricing Policies

Any firm needs to know about the nature and extent of competition in the market. A thorough analysis of the market structure provides this information. Further, with the help of this, firms command a certain ability to determine prices in the market. Also, this information helps firms create strategies for market management under the given competitive conditions.

Price theory, on the other hand, helps the firm in understanding how prices are determined under different kinds of market conditions. Also, it assists the firm in creating pricing policies.

5. Resource Allocation

Business Economics uses advanced tools like linear programming to create the best course of action for an optimal utilization of available resources.

6. Theory of Capital and Investment Decisions

Among other decisions, a firm must carefully evaluate its investment decisions and allocate its capital sensibly. Various theories pertaining to capital and investments offer scientific criteria for choosing investment projects. Further, these theories also help the firm in assessing the efficiency of capital. Business Economics assists the decision-making process when the firm needs to decide between competing uses of funds.

7. Profit Analysis

Profits depend on many factors like changing prices, market conditions, etc. The profit theories help firms in measuring and managing profits under such uncertain conditions. Further, they also help in planning future profits.

8. Risk and Uncertainty Analysis

Most businesses operate under a certain amount of risk and uncertainty. Also, analyzing these risks and uncertainties can help firms in making efficient decisions and formulating plans.

II. Macroeconomics applied to Environmental Issues

External or environmental factors have a measurable impact on the performance of a business. The major macroeconomic factors are:

- Type of economic system
- Stage of the business cycle
- General trends in national income, employment, prices, saving, and investment.
- Government's economic policies
- Performance of the financial sector and capital market
- Socio-economic organizations
- Social and political environment.

The management of a firm has no control over these factors. Therefore, it is important that the firm fine-tunes its policies to minimize the adverse effects of these factors.

Solved Question on Scope of Business Economics

Q1. Demand Analysis is about understanding:

- a. buyer income
- b. buyer behavior
- c. the relationship between a buyer and seller
- d. number of buyers certainly buying from the competitors

Answer: Demand analysis is all about understanding the nature of the consumer's preferences and the effects of the changes in the determinants of demand on them. These determinants include the price of the commodity, tastes, and preferences of consumers, consumer's income, the price of related commodities, etc. In other words, demand analysis is about understanding buyer behavior. Therefore, the correct answer is option b.

Basic Problems Of An Economy

If there is a central economic problem that is present across all countries, without any exception, then it is the problem of scarcity. This problem arises because the resources of all types are limited and have alternative uses. If the resources were unlimited or if a resource only had one single use, then the economic problem would probably not arise. However, be it natural productive resources or man-made capital/consumer goods or money or time, scarcity of resources is the central problem. This central problem gives rise to four basic problems of an economy. In this article, we will look at these basic problems in detail.

The Four Basic Problems of an Economy

As discussed in the paragraph above, the central economic problem of scarcity of resources is broken down into four basic problems of an economy. Let's look at each of them separately.

Basic Problems of an Economy – #1 – What to Produce?

What does a society do when the resources are limited? It decides which goods/service it wants to produce. Further, it also determines the quantity required. For example, should we produce more guns or more butter? Do we opt for capital goods like machines, equipment, etc. or consumer goods like cell phones, etc.? While it sounds elementary, society must decide the type and quantity of every single good/service to be produced.

Basic Problems of an Economy – #2 – How to Produce?

The production of a good is possible by various methods. For example, you can produce cotton cloth using handlooms, power looms or automatic looms. While handlooms require more labour, automatic looms need higher power and capital investment.

Hence, society must choose between the techniques to produce the commodity. Similarly, for all goods and/or services, similar decisions are necessary. Further, the choice depends on the availability of different factors of production and their prices. Usually, a society opts for a technique that optimally utilizes its available resources.

Basic Problems of an Economy – #3 – For whom to Produce?

Think about it – can a society satisfy each and every human wants? Certainly not. Therefore, it has to decide on who gets what share of the total output of goods and services produced. In other words, society decides on the distribution of the goods and services among the members of society.

Basic Problems of an Economy – #4 – What provision should be made for economic growth?

Can a society use all its resources for current consumption? Yes, it can. However, it is not likely to do so. The reason is simple. If a society uses all its resources for current consumption, then its production capacity would never increase.

Therefore, the standard of living and the income of a member of the society will remain constant. Subsequently, in the future, the standard of living will decline. Hence, society must decide on the part of the resources that it wants to save for future progress.

Solved Question on Basic Problems Of An Economy

Q1. What are the four basic problems of an economy?

Answer: The four basic problems of an economy, which arise from the central problem of scarcity of resources are:

1. What to produce?
2. How to produce?
3. For whom to produce?
4. What provisions (if any) are to be made for economic growth?

Role of Price Mechanism

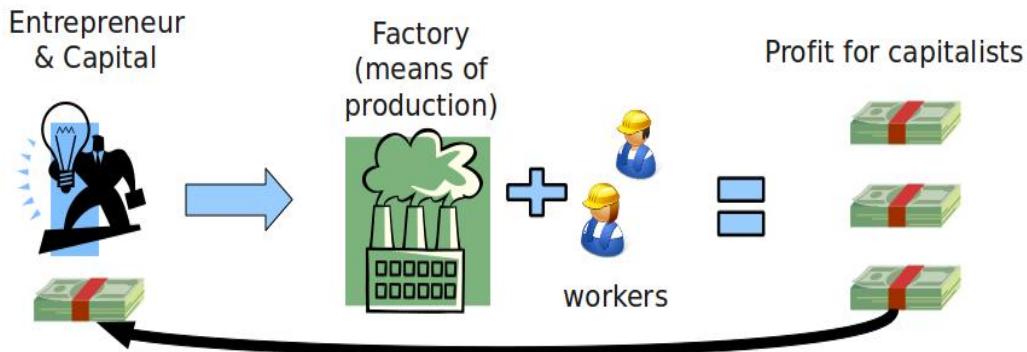
In economics, every country faces some basic problems of an economy. These are problems in relation to what and how to produce goods? Or the provisions to be made for economic growth. Price Mechanism is a key tool in solving all these problems, immaterial of the type of economy. Let us take a look.

Role of Price Mechanism in a Capitalist Economy

In a capitalist economy, the prices of all goods and services will be decided by the market forces exclusively, i.e. the demand and supply of goods. In such a scenario price mechanism plays an important role. It helps us answer the following questions about the economy,

1. **What to Produce:** This is the first function of prices, it will help us decide what to produce. Resources in any economy are limited or scarce, so they must be allocated according to in relation to the total output. Hence prime mechanism will help dictate what goods to be produced.
2. **How much to produce:** The next question that needs answering is the quantity of production required. The resources are limited so the quantity will depend on the preferences and requirements of the society and the relative prices of the product.
3. **How to Produce:** Then the decision must be taken about the method of production. Say for example you are producing cotton textiles. Should you employ a labour-intensive method or an automated method? This will depend on the availability and prices of the factors of production (labour, capital etc.)

- For whom to Produce: An economy cannot satisfy the needs and wants of every person. So the price mechanism will decide how to distribute the total output among its citizens.
- Provisions for Economic Growth: An economy cannot use up all of its limited resources. It has to make provisions for the future so the economy can grow. Otherwise, the economy, income levels, output etc will stagnate and may even decline. So the level of savings and investment must be decided.



Role of Price Mechanism in Mixed Economy

Here price mechanism will play an equal role along with the planning authority. Especially in the private sector of such an economy, the price mechanism along with the competing forces helps the economy with an allocation of resources and other such efficient decisions.

The decision of what to produce in the private sector will depend on market forces, but in the public sector that decision will fall on the central planning authority. Prices will be fixed by the authority on profit-price policy or no-profit no-loss policy. How to produce goods will also depend both on price mechanism and government interaction.

Solved Question on Price Mechanism

Q: A capitalist tool uses price mechanism, a socialist economy uses central planning and a mixed economy uses _____ to solve its basic economic problems.

- a. Price Mechanism
- b. Central Planning Authority
- c. Both of the above
- d. None of the above

Ans: The correct option is C. In a mixed economy, both market forces and government intervention will be responsible for answering and solving the basic questions of an economy.

Classification of Economy

Economics is a social science that deals with the study of how individuals, governmental bodies, firms, and nations make decisions in allocating scarce resources in order to satisfy their unlimited wants and desires. It is a study of production and consumption of goods and services, and the transfer of wealth to produce and obtain those goods and services.

Economics is generally classified into two major categories, microeconomics and macroeconomics.

(1) Microeconomics

The term microeconomics was first coined by a Norwegian economist, Ragner Frich in 1993. Microeconomics is composed of two words- micro and economics. Micro has been derived from a Greek word ‘mikros’ which means small. Economics on the other hand, is the branch of knowledge concerned with production, consumption, and transfer of wealth for acquiring the produced goods and commodities.

Microeconomics is the branch of economics that focuses on the actions of individuals and industries. The dynamics include interaction between buyers and sellers, borrowers and sellers.

It analyzes certain aspects of human behavior, and shows how individuals and firms respond to changes in factor pricing as a result of interaction between demand and supply.

Features of Microeconomics

Study of individual unit

Microeconomics studies the market behavior of individual consumers and producers by dividing the whole economy into small individual units such as a product, a household, a firm, a market, etc.

Price theory

Microeconomics is concerned with the basic theories of demand and supply that affect prices of factors of production (rent, wage, interest, and profit), and price of commodities in the market.

Microscopic approach

Microeconomics has a microscopic view of the economy as it studies the economic behavior of individual consumer, producer, market, etc. rather than the economy as a whole.

Partial equilibrium

Microeconomics considers only a part of the market, a phenomena termed as ‘ceteris peribus’ to attain equilibrium.

Analysis of economic efficiency

The scope of microeconomics is majorly concerned with determining the most efficient way of utilizing scarce resources in order to satisfy the needs and desires of individual consumers and producers.

Construction of models

A range of complex phenomena comprised by microeconomics is made more understandable and expressive with the help of diagrams, charts, economic laws, etc. that explain the relationship between two or more economic variables.

(2) Macroeconomics

Macroeconomics is the branch of economics that studies the behavior of an economy as a whole. It focuses on the aggregate changes that occur in the economy by analyzing the factors that influence the whole economy.

Macroeconomics studies the overall economic phenomena, such as inflation, GNP, problem of unemployment, aggregate consumption, economic growth, investment, etc.

Macroeconomics attempts to understand the causes and consequences of short-run fluctuations in national income, and helps to determine the reasons for long-term economic growth i.e. increase in national income.

Features of Macroeconomics

Study of aggregate economy

Macroeconomics is concerned with the study of economic behavior of the entire economy rather than individual units.

Analysis of aggregate demand and supply

Microeconomics studies the aggregate demand and supply model in order to explain the overall economic phenomena such as the GDP of a nation based on various components.

Assist in overall economic growth

An increase in total output of goods and services is termed as economic growth. The study of macroeconomic components like GDP, GNP, inflation rate, and unemployment rate helps to determine the overall economic growth of a state or country.

Formulation of rules and regulations

The study of macroeconomic variables provide a proper analysis for formulating and implementing policies that help to develop an economy in the best interest of all the participants in a given economy.

Advantage and Disadvantage of Microeconomics

Advantages of Microeconomics

Micro-economics has many theoretical and practical niches. Due to this even the Neo-classical economists had concentrated on micro-economics. Although Keynes popularized , the importance of micro-economics has not declined.

The importance of micro-economics can be analyzed on the basis of following headings:

1. Understand the working of the economy

The knowledge of micro-economics is indispensable to know the working of the economy. The economy consists of public and private sector.

The analysis of individual industries, wages and salary determination, individual taxes, international trade all rests on micro-economic foundations.

Similarly, most of the government activities can be analyzed with same concepts applied to private sector.

As for example, price determination by post office, cost of national defense etc are analyzed by using micro-economics.

2. Efficient allocation of resources

Micro-economics assumes that consumers and producers act rationally. The producer surveys possible course of action, measures the expected benefits and costs of each course of action.

The rational behavior leads to best use of resources. Micro- economics teaches to make best use of resources.

Micro- economics says how resources are allocated in the production of goods and services. It says which commodity is to produce, how much to produce and why to produce.

3. Useful in business decision-making

Micro-economics is applied to analyses problems faced by business executives. The price theory in the service of business executives is known as managerial economics.

It contributes improved decision-making in the area of demand analysis, optimal production decision, pricing decisions to maximize profit. It guides businessmen to determine the price of different goods and factors of production.

The use of micro-economics in business decision-making can be further elaborated as follows:

(a) Optimal resource allocation

Micro-economics is useful in optimal allocation of resources. The resources or factors of production are always scarce and limited with the business firm.

Hence they will have to make the optimal allocation of resources. Micro-economics tells how the productive resources are allocated the production of numerous goods and services.

It, informs – which goods to be produced, how much to d why to produce. Likewise, it informs how to distribute the produced a goods and services among people for consumption.

(b) Optimal production decision

The business firm can produce goods with different alternative techniques. They have to continuously face the problem of the technique to be chosen. Because, the resources like labor and capital are I maximum profit.

Micro-economics helps to solve these problems. "Micro-economics works as a powerful modern tool of managerial decision making in the solutions of such problems." limited. On the contrary, their objective is to earn.

(c) Pricing policy

The firms will have to face the problem of pricing their products. The firm should be able to fix appropriate price to achieve its objectives. Micro-economics provides the basis for analyzing and solving the pricing problems.

It provides knowledge as to how the price of products is determined. The theory of demand, elasticity of demand and other theories of consumer behavior guide a firm in making production and pricing decisions.

4. Study of human behavior

Micro-economics studies many forms of human behavior. The law of diminishing utility, equip-marginal utility, indifference curve theory all study human behavior. Economic theory can be used simply to describe the economic phenomenon. Such descriptive theory is called positive economics.

As for example, when orange becomes scarce, price rises. Positive theory says one causes another. The scarcity of orange is the cause and price rise is the effect.

Economic theory can also be used to say what should happen. When the theory prescribes policy action, it is called normative theory.

As for example, when orange becomes scarce, price should increase, so that consumer will use less orange and switch or to other fruits. (Otherwise they will have to wait in queue.) Micro-economics is both positive and normative science.

5. Examine conditions of economic welfare

The normative price theory is called welfare economics. Welfare economics studies welfare of the people as producers and consumers. It suggests possible ways of improving welfare of people.

It helps to avoid waste and bring more social welfare. It defines and analyses the rules of economic efficiency.

6. Formulation of public policies

Micro-economics helps government to formulate different economic policies for the welfare of the people. It gives tools and foundations for analysis of economic policy.

The economic policy influences the economy. It causes changes in allocation of resources. The public policy relates to tax, loans, subsidy, price etc.

An important tool is benefit cost analysis, which is used widely in public policy decisions. Micro-economics assists government to make best use of scarce resources.

7. Solution of contemporary microeconomic problems

Price theory is also used in practical aspects of economics such as public finance, international trade.

It helps to analyses the effect different taxes, benefits from international trade, correct balance of trade and payments Micro-economics can be used in contemporary micro-economic problems such as issues facing consumers, effect of government policy, control of pollution, programs to alleviate poverty, fair trade pricing etc.

Limitations / Disadvantages of Microeconomics

Micro-economics has following Limitations/Disadvantage:

1. May not be true in aggregates

The use of the conclusions of the equilibrium of small units or the partial equilibrium in case of the economy as a whole provides wrong conclusion.

Because, what is true in case of one unit may not be true in case of aggregates.

For example, individual saving is good since it promotes individual economic prosperity.

But if all people save, the effective demand is reduced. This, in turn, reduces the employment opportunity.

2. Assumption of full employment unrealistic

Micro-economics assumes ‘ceteris paribus’ and ‘full employment’. But this is an unrealistic assumption.

According to J.M. Keynes, the society has unemployment rather than full employment. He observed, “*To assume full employment is to assume our difficulties away.*”

3. Concentration on small parts

Micro-economics concentrates on small parts of the total economy. For example, it studies only about individual demand individual price and so on.

Micro-economics, does not give knowledge about the working of the whole economy. The knowledge of the economy as a whole is also equally important to the men.

Macroeconomics

Definition: Macroeconomics is that specialized field of economics which focuses on the overall economy. It works on the aggregate value of the various individual units, to determine its more substantial impact on the whole nation. All the prominent reforms and policies are based on this concept.

For instance; the nation's income is computed as the per capita income, which is nothing but the average of the total earning of all the citizens in that country.

Scope of Macroeconomics

Macroeconomics is a vital field of study for the economists, government, financial bodies and researchers to analyze the general national issues and economic well-being of a country.

Macroeconomics widely cover two major fundamentals which are further sub-parted into multiple topics, as explained below:

Macroeconomics Theories

Government, as we know, is the regulatory body of a nation, it considers the various aspects which are crucial and impacts the lives of the citizens.

There are six significant theories under macroeconomics:

Economic Growth and Development: The status of a country's economy can be evaluated in terms of the per capita real income, as studied under macroeconomics.

Theory of National Income: It covers the various topics related to the evaluation of national income, including the income, expenditure and budgeting.

Theory of Money: Macroeconomics analyzes the functions of the reserve bank in the economy, the inflow and outflow of money, along with its impact on the employment level.

Theory of International Trade: It is a field of study that enlightens upon the export and import of goods or services. In brief, it determines the impact of cross-border trade and duty charged, on the economy.

Theory of Employment: This stream of macroeconomics helps to figure out the level of unemployment and prevailing employment conditions in the country. Also, to know how it affects the supply, demand, savings, consumption, expenditure behaviour.

Theory of General Price Level: The most important of all is the analysis of product pricing and how these price levels fluctuate because of inflation or deflation.

Macroeconomics Policies

The government and the reserve bank functions together while determining the macroeconomic policies, for the nation's welfare and development.

The two segments of this section are as follows:

Fiscal Policy: As we know, fiscal policy is a means of meeting the deficit of income over the expenditure; it is a form of budgetary decision under macroeconomics.

Monetary Policy: Monetary policy is framed by the reserve bank in collaboration with the government. These policies are the measures taken to maintain economic stability and growth in the country by regulating the various interest rates.

Importance of Macroeconomics

Why do we need to dig into macroeconomics?

The answer is macroeconomics is a vital concept that considers the whole nation and works for the welfare of the economy.

Let us now find out its other significance:

Trade Cycle Analysis

It is beneficial for timing the economic fluctuations to avoid or be prepared for any financial crises or adverse situations.

Economic Policies Formulation

Framing of the monetary and fiscal policies majorly depends upon the study of prevailing macroeconomic conditions in the country.

Downsizes the Effect of Inflation and Deflation

Macroeconomics also helps the government and the financial bodies to be prepared for the situations of economic instability.

Facilitates Material Welfare

This stream of economics gives a broader perspective of social or national issues. Therefore, the ones who look forward to contributing to the welfare of society needs to study macroeconomics.

Regulates Economic System

It ensures or keeps a check over the proper functioning of the country's economy and actual position.

Resolves Economic Issues

The analysis of macroeconomics theories and issues helps the economists and the government to figure out the causes and possible solutions of such macro-level problems.

Economic Development

Dealing with different economic conditions by making use of macroeconomics research, opens up the way towards the country's growth.

Issues Related to Macroeconomics

An economist needs to deeply analyze the following problems prevailing in the society as well as the economy while studying macroeconomics:

Issues Related to Government Policies

The business operations often lead to social costs such as pollution, soil erosion, depletion of natural resources, endangering wildlife, etc.

To control this social cost, the government frames specific policies and regulations which act as a hurdle for business organizations.

Issues Related to Macroeconomic Trends in the Economy

The economic conditions of a country exceedingly influence the operations of any organization.

Various economic trends or factors affecting the business are Gross Domestic Product (GDP), employment conditions, investment opportunities, banking, pricing policies, etc.

Issues Related to Foreign Trade

Many organizations trade (i.e. either export or imports goods from other countries) in international markets. They are sensitive to the fluctuations in the economy of other countries, exchange rates, prices, etc.

Such changes may even influence the economic conditions of the country, ultimately affecting the business organizations.

Limitations of Macroeconomics

Why do some economists criticize macroeconomics?

The following shortcomings of this approach have to lead to its criticism:

- **Considers Aggregates as Homogenous:** The individual data may not be similar in structure or composition. Thus, when such single figures are compiled to get an aggregate value, it may not seem to be that useful.
- **Misleading:** The extensive application of the macroeconomics measures seems to be irrelevant when aimed at 100% results.
- **Fallacy of Deductive Inferences:** Macroeconomics function on aggregate values. But, the interpretation of the individual activities may not be the same as compared to the conclusion drawn on a mass level.
- **Conceptual and Statistical Complexities:** When the individual data have different units, its aggregation becomes arduous and holds no significance.
- **Unnecessary Aggregate Variables:** When the individual elements need to be examined separately, the aggregate values cannot be used for the purpose.
- **Neglects Individual Consumers:** The concept of macroeconomics overlooks the importance of the individual unit or consumer since the fundamental is to make use of the aggregates.
- **Too Much Generalization:** The conclusion derived from the aggregation of the data, is generally taken to be true for all the individuals.

Merits of Micro Economics

- 1) Micro economics is useful in making predictions based on conditions. e.g. demand forecasting depends on the micro economic principles of demand.
- 2) Micro economics uses simple models to understand actual economic phenomenon.
- 3) It explains and analysis how a country can gain from international trade.

Demerits of Micro Economics

- 1) Micro economics is based on unrealistic assumptions, especially in case of full employment assumption which does not exist practically.
- 2) Micro economics is based on the information dealing with individual behaviour, individual customers. Hence, it is difficult to get correct information
- 3) It assumes that all other things being equal (same) but actually it is not so.

Demerits of Macro Economics

- 1) Macro Economics is concerned more with the variables affecting the whole economy. It does not concern with the actions of individual consumers, individual producers etc.
- 2) It studies various economic phenomena with the help of statistical and conceptual methods. The investigators face difficulties in following these methods.
- 3) Indiscriminate use of Macro Economics may mislead the economists in analyzing various economic problems.

Merits of Macro Economics

- 1) *Macroeconomics is highly useful for understanding the various economic policies of a country.*
- 2) *It provides rich information regarding the working of the economy. It helps us to estimate the economic variables relating to the total income, total output, total employment etc.*
- 3) *Macroeconomics helps us to review the overall performance of the economy in different spheres .*

What Is a Free Enterprise Economy?

You walk into the local shopping mall and look around at all the choices. You decide you want to buy a new pair of pants but aren't sure where you want to go. Looking at the map you see twenty different options. Wow! Maybe you should start with a cup of coffee...now you have three options for coffee. There are signs with promotions on them for new products and low prices. You remember your economics teacher telling you that competition is part of a free enterprise economy. This must be what he meant.

A **free enterprise economy** is an economic system with few government restrictions on business activities and ownership. The goal of the system is for businesses to have more freedom from government intervention.

Features

The freedoms can be seen through various features of the free enterprise system. Let's take a look at those features.

- Own private property - This feature is seen as one of the most important freedoms. Think of yourself playing Monopoly, the Parker Brother's board game. The goal is to own all the properties. This gives you power. It is what you do with that power that makes the difference.
- Enter into contracts - Business owners are able to enter into contracts with others in a free enterprise system. This could be a vendor contracting with another company to come in

weekly and change the floor mats, or provide employee uniforms, or furnish a business loan to start the company.

- Make personal choices - The free enterprise system allows the business owner to make decisions. They decide what companies they want as suppliers, what prices they'll charge consumers, and what benefits they'll offer employees. The decisions are impacted by others, but are still at the owner's discretion.
- Engage in free enterprise and competition - Competition is a feature that helps regulate behavior and distribute wealth.
- Self-interest - Business owners are motivated by profit. To gain ground over the competition, companies are forced to take steps to meet the needs of the consumer. This keeps the government from having to put regulations in place to protect the needs of the consumer. However, critics say consumers are often not protected. They point to recalls and product related injuries as evidence.
- Minimal government interference - This feature is in place to minimize regulations that reduce efficiency. If one company gains control of an industry, you have a **monopoly**. This decreases consumer options and increases prices. In this instance, the government will intervene and break up the monopoly. But the goal of the free enterprise system is to limit such intervention so that the government acts as a rule enforcer, rather than being directly involved in economic activity.

Human Wants

Characteristics and Classification of Human Wants

Definition:

It is very difficult to define human wants within few words. All of us want to live. For this reason, we need food, clothing and shelter.

Human desire for better and ever better living, the desire for change, increasing knowledge, human progress etc. have led to emergence and growth of more and newer wants.

Thus wants have been increasing because of the addition of more and more wants as also because of rise in population and new inventions and discoveries. Therefore, human wants are 'ever growing and never ending'.

Human wants have grown for two basic reasons:

- (i) Desire for better living due to introduction of new things;
- (ii) Rise in population growth.

These are two main factors responsible for the growth of human wants.

Characteristics of Human Wants:

There are several characteristics of human wants.

These are listed below:

(i) Wants are repeated:

Several human wants occur again and again during the same day. We want food during breakfast, lunch, dinner etc. However, we want medicine at the time we feel sick. Therefore, some of our wants are reoccurred many times during a day, while some human wants only repeated after a long time. In some cases, human wants are only occasional.

(ii) Wants may differ with age:

Human wants are changing according to the age. A child wants toys, whereas an adult wants a motorbike. A student wants to go to school. A grown-up wants a job and a secured life.

(iii) Wants may differ with gender:

Wants of a boy and a girl are different. A girl wants to dance, whereas a boy wants to play. A gentleman wants shirts, pants, ties etc. However, a lady wants sarees and salwar suits. Thus, both men and women want different goods according to their needs.

(iv) Wants may differ with preferences:

Human wants are also changing according to tastes and preferences. Twin sisters may want different types of foods and dresses. Some persons want spicy foods while some others want very simple non-spicy foods. Wants may also change according to the habits of the people.

(v) Wants may differ with climate:

A same person wants woolen clothes during winter, cotton clothes in summer and raincoats at the time of rainy season. People from mountain or hilly areas want room-heater, but plain-land people demand for AC machine.

(vi) Wants may differ with culture:

A Bengali wants rice and fish, a Punjabi wants roti and dal, a Tamil wants idli and dosa etc. in their food. An European wants 'coat, pant & tie', whereas an Indian wants 'kurta and pajama'. Thus, human wants are varying with culture.

(vii) Wants may differ with health:

A healthy person wants sufficient good food. However, a sick or ill person wants proper medicines.

(viii) Wants Are Unlimited:

Crisis is the mother of civilization. With the passage of time, human wants are increasing. We may satisfy some of our wants for time being, but they may also reoccur. Moreover, there are so many wants which will never be satisfied during our lifetime.

Classification of Wants:

Wants can be classified in following ways:

(i) Economic and Non-Economic Wants:

The wants which cannot be satisfied by such goods and services that can be bought are known as economic wants. For example, want for food, want for book, want for dress etc. To satisfy these wants, a consumer has to spend money.

The wants which cannot be satisfied by making monetary payment for them, are known as non- economic want. We want love and affection of our parents, relatives, neighbours etc. We want stable government. We also want international peace and amity. We want universal brotherhood.

(ii) Individual Wants and Collective Wants:

Personal or individual wants refer to those wants which are only demanded by a single person or an individual. For example, Sachin wants a cricket bat, Baichug Bhutia wants a football, Leander Paes wants tennis-racket etc. These are the personal wants. 'On the other hand' all the things are wanted by us collectively. For example, good government, roads, hospitals, schools etc. are collective wants or social wants. Again, we all want India's win either in a football match or in a cricket match.

(iii) Necessity, Comfort and Luxury:

Human wants are varying in nature. Want for food, clothing, shelter are the basic necessities of human beings. We want books, pens, pencils, medicines, fuel and cooking gas etc. All these are basic necessities of human life.

On several occasions, we want to make our life comfortable. We want washing machine, AC- machine, pressure cooker, mixer, geyser, motor cycle, mobile phone etc. for our little comfort. These wants are classified as comforts.

There are other wants which are meant for pleasure. Wants for Plasma-TV, AC-car, well furnished house, computers to play games, travel by air etc. All these wants are called luxuries. However, what are considered as comforts today may become necessities in near future.

Nature of Human Wants

All the desires and aspirations and motives of humans are known as human wants in economics. And the wants that can be satisfied with goods and services of any kind are economic wants. Like for example food, shelter, clothing, etc are economic human wants. And those which cannot be bought are non-economic wants like peace, love, affection, etc.

All human wants to have some basic common characteristics. Let us have a look at the similar nature of human wants.

- Wants are unlimited. A human is never truly satisfied, and so his wants to are endless. We may temporarily satisfy some of our wants but they always reoccur.
- Different wants have varying degrees of intensity. Some wants are extremely urgent, some are less intense.
- Human wants tend to be competitive. We have limited means and so we cannot satisfy all of our wants. So they compete with each other. And the most urgent want will be satisfied.
- Wants can be complementary as well. To satisfy our want for one good we have to make arrangements for another. So now we have the want of two goods. For example to run a car you need petrol.
- The wants of any person will constantly be changing according to the time and place and situation of the person.
- Over time wants of a person can become his habits or customs.

Classification of Human Wants

We can classify wants into three broad categories in economics. These are Necessaries, Comforts, and Luxuries. Let us take a look at all three.

1] Necessaries

These are the human wants absolutely essential for living and surviving. Further necessities will divide into necessities for life, for efficiency and finally conventional necessities. First and most important wants are obviously necessities for life. These include food, water, clothing, shelter, etc.

And then there are necessities that improve our efficiency and well being like comfortable housing, nourishing foods, etc. Finally, there are conventional necessities that arise out of habits, customs or conventions.

2] Comforts

These are the extra wants of the human after necessities. They are not as essential or urgent as necessities. Comforts are the wants that make the life of the human comfortable and satisfying. Generally, these include items that save labour on behalf of the human or provide comfort to him in his life. So items such as fans, furnished houses, special clothing for occasions, etc fall under this category of human wants.

3] Luxuries

These are goods that give humans pleasure and prestige in society. They are not needed for existence or comfort but provide happiness and acceptance in the world. These wants may be called superfluous. And such items tend to be expensive.

Some examples of luxuries are cars, diamond jewelry, expensive designer clothing, ACs. As you will notice all these items are not essential to our living. They are items of prestige.

Utility

What Is Utility?

Utility is a term in economics that refers to the total satisfaction received from consuming a good or service. Economic theories based on rational choice usually assume that consumers will strive to maximize their utility. The economic utility of a good or service is important to understand, because it directly influences the demand, and therefore price, of that good or service. In practice, a consumer's utility is impossible to measure and quantify. However, some economists believe that they can indirectly estimate what is the utility for an economic good or service by employing various models.

Understanding Utility

The utility definition in economics is derived from the concept of usefulness. An economic good yields utility to the extent to which it's useful for satisfying a consumer's want or need. Various schools of thought differ as to how to model economic utility and measure the usefulness of a good or service. Utility in economics was first coined by the noted 18th-century Swiss mathematician Daniel Bernoulli. Since then, economic theory has progressed, leading to various types of economic utility.

Concept Of Utility

According to Prof. Hibden: "Utility is the ability of a good to satisfy a want." According to Nicholson: "Utility may be the quality which makes a thing desirable."

Thus, in economics, utility is the capacity of a commodity or service to satisfy human wants. Hence in simple sense, it is the want satisfying capacity of a commodity or service.

KEY POINTS

- Utility, in economics, refers to the usefulness or enjoyment a consumer can get from a service or good.
- Economic utility can decline as the supply of a service or good increases.
- Marginal utility is the utility gained by consuming an additional unit of a service or good.

Features of Utility:

(i) Utility is Subjective:

The utility of a commodity is always subjective because it depends upon the consumer as much as on commodity. It is the psychological satisfaction as feeling of the consumer. Hence, it is internal not external.

(ii) Utility is Relative and Variable:

Utility is highly relative and variable. It varies from person to person and from time to time or place to place for the same individual. Again, a same commodity can give different utility to different people. Because, utility a person derives from either good or service depends not only on his psychological attitude but also on his intensity of desire.

(iii) Utility is Unmeasurable:

Although Prof. Marshall claimed that utility can be cardinally measured in terms of money or price in his Marginal Utility Analysis Theory. However, according to Hicks, Allen and Slutsky, utility cannot be measured in terms of number. It can only be ranked or ordered in terms of preference pattern.

(iv) Utility is Abstract:

It is abstract in a sense as it cannot be seen or touched or felt. For example, teaching of a teacher, advice of a lawyer can neither be seen nor touched. Hence, utility is abstract.

(v) Utility, Usefulness and Morality:

Utility is totally different from usefulness and morality. It means a good possesses utility even when it may not be useful or does not possess any moral and ethical importance. For example, we know that smoking or wine are harmful. However, at the same time they are very useful for an individual who is either drunkard or smoker because these harmful goods have utility to such persons.

(vi) Utility and Pleasure:

It is not necessary that a commodity possessing utility also gives pleasure whenever it is consumed. An injection possesses utility to an individual. However, it gives him/her physical pain. Hence, utility and pleasure are unrelated.

Ordinal Utility

Early economists of the Spanish Scholastic tradition of the 1300s and 1400s described the economic value of goods as deriving directly from this property of usefulness and based their theories of prices and monetary exchanges. This conception of utility was not quantified, but a qualitative property of an economic good. Later economists, particularly those of the Austrian School, developed this idea into an ordinal theory of utility, or the idea that individuals could order or rank the usefulness of various discrete units of economic goods.

Austrian economist Carl Menger, in a discovery known as the marginal revolution, used this type of framework to help him resolve the diamond-water paradox that had vexed many previous economists. Because the first available units of any economic good will be put to the most highly valued uses, and subsequent units go to lower-valued uses, this ordinal theory of utility is useful for explaining the law of diminishing marginal utility and fundamental economic laws of supply and demand.

Cardinal Utility

To Bernoulli and other economists, utility is modeled as a quantifiable or cardinal property of the economic goods that a person consumes. To help with this quantitative measurement of satisfaction, economists assume a unit known as a “util” to represent the amount of psychological satisfaction a specific good or service generates for a subset of

people in various situations. The concept of a measurable util makes it possible to treat economic theory and relationships using mathematical symbols and calculations.

However, it separates the theory of economic utility from actual observation and experience, since “utils” cannot actually be observed, measured, or compared between different economic goods or between individuals.

If, for example, an individual judges that a piece of pizza will yield 10 utils and that a bowl of pasta will yield 12 utils, that individual will know that eating the pasta will be more satisfying. For the producers of pizza and pasta, knowing that the average bowl of pasta will yield two additional utils will help them price pasta slightly higher than pizza.

Additionally, utils can decrease as the number of products or services consumed increases. The first slice of pizza may yield 10 utils, but as more pizza is consumed, the utils may decrease as people become full. This process will help consumers understand how to maximize their utility by allocating their money between multiple types of goods and services as well as help companies understand how to structure tiered pricing.

Economic utility can be estimated by observing a consumer's choice between similar products. However, measuring utility becomes challenging as more variables or differences are present between the choices.

Difference Between Cardinal Utility and Ordinal Utility

Cardinal Utility	Ordinal Utility
Definition	
It explains that the satisfaction level after consuming a good or service can be scaled in terms of countable numbers.	It explains that the satisfaction after consuming a good or service cannot be scaled in numbers, however, these things can be arranged in the order of preference.
Example	
Sam submits pizza gives him 60 utils of satisfaction whereas burger gives only 40 utils.	Sam submit, he gets more satisfaction from Pizzas as compare to the burger.
Measurement	
Utility is measured on the basis of utils	Utility is ranked on the basis of satisfaction
Realistic	
It is less practical.	It is more practical and sensible.
Used By	
This theory was applied by Prof. Marshall	This theory was applied by Prof. J R Hicks

The Definition of Total Utility

If utility in economics is cardinal and measurable, the total utility (TU) is defined as the sum of the satisfaction that a person can receive from the consumption of all units of a specific product or service. Using the example above, if a person can only consume three

slices of pizza and the first slice of pizza consumed yields ten utils, the second slice of pizza consumed yields eight utils, and the third slice yields two utils, the total utility of pizza would be twenty utils.

The Definition of Marginal Utility

Marginal utility (MU) is defined as the additional (cardinal) utility gained from the consumption of one additional unit of a good or service or the additional (ordinal) use that a person has for an additional unit. Using the same example, if the economic utility of the first slice of pizza is ten utils and the utility of the second slice is eight utils, the MU of eating the second slice is eight utils. If the utility of a third slice is two utils, the MU of eating that third slice is two utils. In ordinal utility terms, a person might eat the first slice of pizza, share the second slice with their roommate, save the third slice for breakfast, and use the fourth slice as a doorstop.

Total Utility

What Is Total Utility?

Total utility is the aggregate summation of satisfaction or fulfillment that a consumer receives through the consumption of goods or services.

Understanding Total Utility

In economics, utility refers to the satisfaction gained from consuming a good or service. Total utility is usually defined as a quantifiable summation of satisfaction or happiness obtained from consuming multiple units of a particular good or service. Utility and total utility are used in economic analysis of consumer behaviors within a marketplace. Economists seek to quantify total utility using special calculations. Economists may also study several economic metrics in conjunction with total utility when seeking to understand how consumer behaviors align with supply and demand.

In economics, economists typically view changes in behavior and consumption by analyzing marginal increases and marginal decreases. Marginal changes will usually be either scaled increases or scaled decreases. In the case of total utility, marginal refers to the increasing or decreasing level of utility that is obtained with added consumptions.

Total utility is often studied alongside Rational Choice Theory and the Law of Diminishing Marginal Utility. Rational Choice Theory says that consumers seek to maximize their utility with each unit of consumption. Consumer theory and demand theory suggest that consumer actions are driven toward utility maximization by attempting to acquire the most satisfaction possible in the most affordable way. In general, classical economic theories show that most consumers want to get the highest possible level of utility per unit for the money they spend.

Total utility is usually measured in relative units called utils. When measuring total utility, analysis can span from one unit of consumption to multiple units. For example, a cookie provides a level of utility as determined by its singular consumption, while a bag of cookies may provide total utility over the course of time it takes to completely consume all the cookies in the bag.

KEY POINTS

- Total utility is the aggregate summation of satisfaction or fulfillment that a consumer receives through the consumption of goods or services.
- Economists seek to quantify utility and total utility using utils.
- To best understand total utility, one should understand the Law of Diminishing Marginal Utility, which states that as more of a single good or service is consumed, the additional satisfaction, referred to as marginal utility, drops.
- Total utility is a core concept studied when seeking to analyze consumer behaviors.
- In general, economic theories believe that consumer actions are usually based on the goal of total utility maximization which leads to purchasing units perceived to have the greatest utility satisfaction.

How to Calculate Total Utility

Each individual unit of a good or service has its own utility and each additional unit of consumption will have its own marginal utility. The total utility will be the aggregated sum of utility gained from all units being studied.

A total utility formula will include utils. Utils are typically relative and assigned a base value. Economists usually analyze utils across a spectrum to provide comparable analysis of the amount of util or satisfaction gained from a unit of consumption. An assigned base value for utils is needed because theoretically there is no real value for utility satisfaction in general.

To find total utility economists use the following basic total utility formula:

$$TU = U_1 + MU_2 + MU_3 \dots$$

TU = Total Utility

U = Utility

MU = Marginal Utility

The total utility is equal to the sum of utils gained from each unit of consumption. In the equation, each unit of consumption is expected to have slightly less utility as more units are consumed.

Total Utility Maximization

Economic theory regarding consumer activities suggests that the primary goal of the consumer is to achieve the largest amount of utility for the least amount of cost. This is partly due to the limited amount of funds a person may possess, as well as a desire to achieve as much satisfaction from the consumption of goods and services as possible. For example, if a consumer is presented with two purchasing options with the same financial cost, and neither option is more necessary or functional than the other, the consumer will choose the good or service that provides the most utility for the money.

Marginal Utility

What Is Marginal Utility?

Marginal utility is the added satisfaction that a consumer gets from having one more unit of a good or service. The concept of marginal utility is used by economists to determine how much of an item consumers are willing to purchase.

Positive marginal utility occurs when the consumption of an additional item increases the total utility. On the other hand, negative marginal utility occurs when the consumption of one more unit decreases the overall utility.

SOME KEY POINTS REGARDING MARGINAL UTILITY

- Marginal utility is the added satisfaction a consumer gets from having one more unit of a good or service.
- The concept of marginal utility is used by economists to determine how much of an item consumers are willing to purchase.
- The law of diminishing marginal utility is often used to justify progressive taxes.
- Marginal utility can be positive, zero, or negative.

Understanding Marginal Utility

Economists use the idea of marginal utility to gauge how satisfaction levels affect consumer decisions. Economists have also identified a concept known as the law of diminishing marginal utility. It describes how the first unit of consumption of a good or service carries more utility than later units.

Important Point

Although marginal utility tends to decrease with consumption, it may or may not ever reach zero depending on the good consumed.

Marginal utility is useful in explaining how consumers make choices to get the most benefit from their limited budgets. In general, people will continue consuming more of a good as long as the marginal utility is greater than the marginal cost. In an efficient market, the price equals the marginal cost. That is why people keep buying more until the marginal utility of consumption falls to the price of the good.

The law of diminishing marginal utility is often used to justify progressive taxes. The idea is that higher taxes cause less loss of utility for someone with a higher income. In this case, everyone gets diminishing marginal utility from money. Suppose that the government must raise \$20,000 from each person to pay for its expenses. If the average income is \$60,000 before taxes, then the average person would make \$40,000 after taxes and have a reasonable standard of living.

However, asking people making only \$20,000 to give it all up to the government would be unfair and demand a far greater sacrifice. That is why poll taxes, which require everyone to pay an equal amount, tend to be unpopular.

Also, a flat tax without individual exemptions that required everyone to pay the same percentage would impact those with less income more because of marginal utility.

Someone making \$15,000 per year would be taxed into poverty by a 33% tax, while someone making \$60,000 would still have about \$40,000.

Types of Marginal Utility

There are multiple kinds of marginal utility. Three of the most common ones are as follows:

Positive Marginal Utility

Positive marginal utility occurs when having more of an item brings additional happiness. Suppose you like eating a slice of cake, but a second slice would bring you some extra joy. Then, your marginal utility from consuming cake is positive.

Zero Marginal Utility

Zero marginal utility is what happens when consuming more of an item brings no extra measure of satisfaction. For example, you might feel fairly full after two slices of cake and wouldn't really feel any better after having a third slice. In this case, your marginal utility from eating cake is zero.

Negative Marginal Utility

Negative marginal utility is where you have too much of an item, so consuming more is actually harmful. For instance, the fourth slice of cake might even make you sick after eating three pieces of cake.

History of Marginal Utility

The concept of marginal utility was developed by economists who were attempting to explain the economic reality of price, which they believed was driven by a product's utility. In the 18th century, economist Adam Smith discussed what is known as "the paradox of water and diamonds." This paradox states that water has far less value than diamonds, even though water is vital to human life.¹

This disparity intrigued economists and philosophers around the world. In the 1870s, three economists—William Stanley Jevons, Carl Menger, and Leon Walras—each independently came to the conclusion that marginal utility was the answer to the water and diamonds paradox. In his book, *The Theory of Political Economy*, Jevons explained that economic decisions are made based on "final" (marginal) utility rather than total utility.

Example of Marginal Utility

David has four gallons of milk, then decides to purchase a fifth gallon. Meanwhile, Kevin has six gallons of milk and likewise chooses to buy an additional gallon. David benefits from not having to go to the store again for a few days, so his marginal utility is still positive. On the other hand, Kevin may have purchased more milk than he can reasonably consume, meaning his marginal utility might be zero.

The chief takeaway from this scenario is that the marginal utility of a buyer who acquires more and more of a product steadily declines. Eventually, there is no additional consumer need for the product in many cases. At that point, the marginal utility of the next unit equals zero and consumption ends.

Law Of Diminishing Marginal Utility

What Is Diminishing Marginal Utility?

The Law Of Diminishing Marginal Utility states that all else equal as consumption increases the marginal utility derived from each additional unit declines. Marginal utility is derived as the change in utility as an additional unit is consumed. Utility is an economic term used to represent satisfaction or happiness. Marginal utility is the incremental increase in utility that results from consumption of one additional unit.

Understanding the Law

Marginal utility may decrease into negative utility, as it may become entirely unfavorable to consume another unit of any product. Therefore, the first unit of consumption for any product is typically highest, with every unit of consumption to follow holding less and less utility. Consumers handle the law of diminishing marginal utility by consuming numerous quantities of numerous goods.

Diminishing Prices

The Law of Diminishing Marginal Utility directly relates to the concept of diminishing prices. As the utility of a product decreases as its consumption increases, consumers are willing to pay smaller dollar amounts for more of the product. For example, assume an individual pays \$100 for a vacuum cleaner. Because he has little value for a second vacuum cleaner, the same individual is willing to pay only \$20 for a second vacuum cleaner. The law of diminishing marginal utility directly impacts a company's pricing because the price charged for an item must correspond to the consumer's marginal utility and willingness to consume or utilize the good.

Example of Diminishing Utility

An individual can purchase a slice of pizza for \$2; she is quite hungry and decides to buy five slices of pizza. After doing so, the individual consumes the first slice of pizza and gains a certain positive utility from eating the food. Because the individual was hungry and this is the first food she consumed, the first slice of pizza has a high benefit. Upon consuming the second slice of pizza, the individual's appetite is becoming satisfied. She wasn't as hungry as before, so the second slice of pizza had a smaller benefit and enjoyment as the first. The third slice, as before, holds even less utility as the individual is now not hungry anymore.

In fact, the fourth slice of pizza has experienced a diminished marginal utility as well, as it is difficult to be consumed because the individual experiences discomfort upon being full from food. Finally, the fifth slice of pizza cannot even be consumed. The individual is so full from the first four slices that consuming the last slice of pizza results in negative utility. The five slices of pizza demonstrate the decreasing utility that is experienced upon the consumption of any good. In a business application, a company may benefit from having three accountants on its staff. However, if there is no need for another accountant, hiring a fourth accountant results in a diminished utility, as little benefit is gained from the new hire.