Basic Introduction to Microeconomics and It's Application

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ABSTRACT:
Microeconomics is a subfield of economics that examines how markets, businesses, and consumers act individually. The main ideas and principles of microeconomics are summarized in this chapter, including supply and demand, market equilibrium, and the influence of the government on market results. Microeconomics' primary focus is on the allocation of scarce resources by people and businesses. The microeconomic analysis is based on the basic idea of supply and demand. The quantity of an item or service that producers are willing to sell at a particular price is known as supply, but the quantity that customers are willing to purchase at that same price is known as demand.

KEYWORDS:

Cost Production, Economic Theory, Normative Science, Supply Demand, Resource Allocation.

I. INTRODUCTION

Economizing, or choosing between various uses of finite resources, is what economics is all about. Millions of people, businesses, and governmental entities make decisions every day. Economics investigates how these decisions combine to form an economic system and how this system functions. By L.G. Reynolds in economic theory, scarcity is key. Economic analysis is primarily about maximizing anything within certain bounds free time, wealth, health, and happiness are all frequently reduced to the concept of utility. A tradeoff is unavoidably defined by these limitations or scarcity. For instance, one can earn more money by working longer hours but with less time available there are only so many hours in a day. Since there is a limited amount of land available for food production, one can only have more apples at the expense of, for instance, fewer grapes. For instance, Adam Smith thought about the compromise between convenience or time and money. He talked about how someone may choose to live close to town and pay more for rent or live farther out and pay less, paying the difference out of his convenience [1], [2].

With the release of Prof. Adam Smith's widely read book, "An Enquiry into the Nature and Causes of Wealth of Nations" in 1776, the study of economics as a discipline was established. Political economy was the term used at the time, and it was still in use at least into the middle of the 19th century. Since then, using inductive and deductive reasoning, economists have created tools and principles. The Wealth of Nations is a turning point in the development of economic theory since it distinguished economics from other social sciences. The Greek terms Oakes house and Nemea to manage are the roots of the English word economics, which originally meant administering a home while making the most of the resources available. Let's define a few key terms that are regularly used in economic theory [3], [4].

Financial Definition

A science of wealth, according to early economists like J.E. Carnes, J.B. Say, and F.A. Walker. According to Adam Smith, who is also known as the father of economics, economics is a study that examines the origins and dynamics of global wealth. In other words, economics is concerned with how a country can amass more and more money. According to J.S. Mill, it is the applied science concerned with the creation and distribution of wealth. According to American economist F.A. Walker, economics is the body of knowledge that has to do with wealth. All of these concepts so have to do with wealth. The aforementioned definitions have, however, come under fire for several reasons. Because of this, economists like Marshall, Robbins, and Samuelson have proposed more thorough definitions. Gradually, the focus has switched from wealth to people. It is on one side a study of wealth; and on the other, and more important side, a part of the study of man as Marshall puts it. Welfare Concept Marshall argues that economics examines both the aspect of how to acquire riches and the side of how to use that wealth to obtain material improvements in human life. In truth, money is meaningless by itself unless it is used to buy all we need for our survival as well as the comforts we desire to live. Marshall consequently believed that having money is a means to an end. In other words, economics is largely a science about people rather than a science about riches. It might be referred to be the science that investigates human welfare [5], [6].

According to Marshall's concept, the following four points are very important:

1. Economics encompasses both the study of people and the study of wealth. To advance the welfare of people, wealth is necessary.
2. Economics deals with regular people who are affected by all of their natural inclinations, such as love, affection, and altruism, and who are not just driven by the desire to amass the greatest amount of wealth for its purpose. Wealth by itself has no use until it is used to acquire worldly possessions.
3. The social science of economics. Instead of focusing on lone individuals, it studies everyone who is a part of society. Its goal is to help find answers to many social issues.
4. Economics focuses solely on the material necessities of well-being. In other words, it researches what leads to wealth or welfare. It disregards the intangible facets of human existence.

Definition of Scarcity

Economics is the science that studies human behavior as a relationship between ends and scarce resources that have alternative uses, he asserts. This concept concentrated on a particular facet of human activity, namely, behavior related to the use of limited resources to fulfill unbounded objectives wants. Therefore, Robbins' definition placed special focus on the following ideas:

1. Ends are the desires that every person has and hopes to fulfill. Want is genuine hankering for something that can be sated by making an effort to get it. There is no end to our demands, and as soon as one is satisfied, another one appears. One might want to buy a car or a house, for instance.
2. Limited resources or means. For the fulfillment of varied wants, means must be used. For instance, having money is a crucial way to fulfill many of our desires. As was previously mentioned, resources are restricted and must thus be used efficiently because they are scarce limited in quantity compared to demand. To get the greatest level of enjoyment, we must not waste scarce resources but rather use them wisely.
3. Robbins added that the limited resources can be used for other things. It indicates that a good or resource can be used in a variety of ways. As a result, there is an almost endless demand for that resource or product overall. If we have a hundred rupee note, for instance, we can use it to buy a book or some stylish clothing. It is ours to utilize in any other manner, illimitably.

II. DISCUSSION

Microeconomics and macroeconomics are the two subfields in the study of economics. Macroeconomics, which looks at the economy as a whole and takes into account the aggregate supply and demand for money, capital, and goods, and microeconomics, which deals with individual agents like individuals and enterprises. Resource allocation, production, distribution, trade, and competition are some of the aspects of economics that are being given special emphasis. In theory, economics can be used to solve any problem involving choice under scarcity or evaluating economic value. Professor

Ragnar Frisch of Oslo University is credited for coining the terms Micro and Macroeconomics in the 1920s. Micro refers to a millionth of something. Greek for small is micros. Thus, only a small portion of the entire economy is covered by microeconomics. For instance, examining the price of a specific good instead of the overall level of prices in the economy is essentially studying microeconomics [7], [8].

Microeconomics is the precise study of how individual economic agents consumers, businesses, industries, etc. behave. Consequently, it is the study of a specific unit rather than all units taken as a whole. Price theory, a branch of microeconomics, explains the distribution or composition of total production. Microeconomics, in a nutshell, is the study of how organizations, industries, and consumers behave economically as well as how output and money are distributed among them. Individuals are taken into account as both labor and capital suppliers as well as the ultimate consumers of the finished good. On the other hand, it examines businesses as both labor and capital consumers and product suppliers. The goal of microeconomics is to analyses the market structure or other pricing processes that determine relative prices for commodities and services and/or distribute societal resources among the numerous possible uses. In the field of microeconomics, we look at:

1. Product pricing theory.
2. Consumer behavior theory.
3. Cost and production theory.
4. Factor pricing theory.
5. Wage theory.
6. Rent theory
7. An interesting theory.
8. Profits theory.
9. Economic welfare theory.

Microeconomics has played a significant role in the investigation of economic theory. In actuality, it serves as a foundation for economic theory. It has ramifications for both theory and practice. Important aspects of its importance are listed as follows

1. Microeconomics is very helpful in managing the scarce resources that are available in a nation effectively.
2. Microeconomics is useful in understanding how a free enterprise system operates in an environment without centralized authority.
3. Microeconomics is used to explain the benefits of global trade, the imbalance of payments, and the setting of exchange rates.
4. It describes how products and services created in the society are dispersed through market mechanisms.
5. It aids in the creation of economic policies that are intended to advance production efficiency and human welfare.
6. The foundation of welfare economics is microeconomics.
7. To build economic models and better comprehend actual economic processes, microeconomics is applied.

Despite the fact that it offers so many advantages, it also has some flaws or restrictions. Which are:

1. It is unable to explain how an economy operates as a whole.
2. It makes the unusual in actual life assumption of full employment.
3. Problems involving public finances, monetary and fiscal policy, etc., cannot be solved using it.

Economic Positivism and Normative Theory

We consider whether economics is a positive or normative science while debating the field's application. Normative science explains what should be, whereas positive science depicts what is. Positive science, then, presents a situation as it actually is, while normative science analyses the context and suggests/comments on whether something is wrong or right. Examples include the positive statement Population in India is rising and the normative statement Rising population is a barrier to development. Economic theory is viewed as a positive science by classical economists. They declined to comment on whether the current economic climate is right or incorrect. Robbins agreed with the classical school of thought and claimed that the desirability or lack thereof of 'goals' is unimportant to economics.

An economist's job is to research and explain rather than to advocate or condemn. But economics shouldn't be viewed as a purely constructive science. It should be acceptable to make moral assessments on economic circumstances. As a result, it is seen as both normative science and positive science. Economics is the social science that investigates how few resources are distributed to meet boundless wants. Analyzing the creation, transfer, exchange, and consumption of products and services is necessary. When economics recommends a specific course of action, it is considered to be normative. Positive economics aims to explain the effects of various decisions given a set of assumptions or observations.

Application

Numerous fields and industries use microeconomics in different ways. The following are some significant uses of microeconomics:

1. **Microeconomics:** assists organizations in analyzing market conditions and choosing the best pricing methods. Firms can establish prices that maximize their profits while taking into consideration customer behavior and competitive factors by understanding the dynamics of supply and demand.
2. **Customer Behavior:** Microeconomics sheds light on customer preferences, judgments, and purchasing habits. This knowledge aids companies in creating efficient marketing plans, producing niche goods, and foreseeing shifts in consumer demand.
3. **Microeconomics assists:** businesses in analyzing their production processes, figuring out the best amount of output, and reducing expenses. In order to maximize profitability, businesses make production decisions using concepts like economies of scale, marginal cost, and production efficiency.
4. **Market Structures and Competition:** The study of microeconomics looks at a variety of market structures, including monopolies, oligopolies, and monopolistic competition. Businesses can evaluate market competitiveness, pinpoint entrance hurdles, and create strategies to acquire a competitive edge by understanding these structures.
5. **Resource Allocation:** Microeconomics examines the distribution of resources among various businesses and purposes. It supports the distribution of public resources, including those for infrastructure, healthcare, education, and environmental preservation.
6. **Microeconomics:** is essential to the formulation and analysis of policies. Microeconomic theories are used by policymakers to assess the potential effects of rules, taxes, subsidies, and other government initiatives. Microeconomics aids in evaluating the efficiency and equality implications of policy options and aids in the development of policies that advance economic welfare.
7. **Microeconomics studies:** the labor market, including how wages are set, the supply and demand of workers, and the results of the labor market. It aids businesses in selecting employees, comprehending salary disparities, and researching labor market trends. Additionally, it helps policymakers create labor market rules like employment laws and minimum wage legislation.
8. **Microeconomics offers:** resources for analyzing environmental problems such pollution reduction, resource depletion, and climate change. It supports the development of market-based mechanisms like cap-and-trade systems, market-based environmental policy evaluation, and sustainable resource management.
9. **These are only a few instances of how microeconomics is used:** It is possible for firms, politicians, and people to make well-informed decisions and comprehend the financial

repercussions of their choices by applying the principles and concepts of microeconomics to a variety of industries and decision-making scenarios.

Advantages

The importance and relevance of microeconomics in the discipline of economics are largely due to the numerous benefits it provides. The following are some major benefits of microeconomics:

1. **Understanding Individual Decision-Making:** The subject of microeconomics is the conduct of particular individuals in families, businesses, and consumers. It aids in comprehending how decisions are made by people in light of their preferences, restrictions, and incentives. For forecasting and analyzing customer behavior, market trends, and corporate strategy, this information is useful.
2. **Analysis of Market Efficiency:** Microeconomics offers methods for determining how well markets distribute resources. Concepts like supply and demand, market equilibrium, and price elasticity aid in assessing how well market mechanisms perform in producing the best results. This knowledge is crucial for spotting market imperfections and creating efficient policy designs. Economic welfare can be evaluated on both an individual and social level thanks to microeconomics. It aids in quantifying consumer and producer surpluses, analyzing resource allocation, and determining how economic policies affect various stakeholders. Making decisions that advance the general well-being of society requires the knowledge provided by this information.
3. **Making Strategic Business Decisions:** Microeconomic analysis helps businesses make sound business decisions. It offers information on market structures, dynamics of competition, price plans, and production effectiveness. Microeconomic principles can be used by businesses to maximize output, cut costs, and increase profits. Microeconomics also aids in the comprehension of consumer behavior and the creation of successful marketing plans. Microeconomics has a considerable impact on both the design and evaluation of policies. It offers a framework for evaluating the prospective effects of various interventions and policies, including levies, subsidies, rules, and trade policies. Understanding the trade-offs involved, assessing the efficiency and equality consequences, and designing policies that are in line with economic goals are all made possible with the use of microeconomic analysis.
4. **Microeconomics Serves and Applications:** Microeconomics serves as the foundation for empirical research and analysis in a variety of fields. It offers researchers and economists a toolkit to investigate various topics, such as consumer preferences, labor markets, environmental problems, and more. Microeconomic principles can be used to make defensible decisions and intelligent policy suggestions. Microeconomics has application to individual financial decision-making in the context of personal finances. Making wise decisions about saving, spending, and investing requires an understanding of ideas like opportunity cost, financial restrictions, and utility maximization. Microeconomics gives people the power to realize their goals and make the best financial decisions for themselves.

Models of Microeconomics

In a market with perfect competition, prices are determined by supply and demand. It concludes that in a market with perfect competition and no externalities, per-unit taxes, or price regulations, the unit price for a certain good is the price at which consumer demand equals producer supply. A stable economic equilibrium is created by this pricing. A graph with Price on the Y-axis and Quantity on the X-axis According to the supply and demand concept, prices change as a result of a balance between consumer demand and product availability. The graph shows an increase in demand right-shifting from D1 to D2, as well as the resulting rise in price and quantity needed to reach a new supply curve equilibrium point S. The properties of commodities produced and traded in a market economy that can be observed most immediately are prices and quantities, according to some. The organizing principle for describing how prices coordinate the amounts produced and consumed is the theory of supply and demand.

Microeconomics refers to the determination of prices and output for a market with perfect competition, which includes the requirement of having no customers or sellers with sufficient purchasing power. Demand is the ratio of the quantity that all purchasers would be willing to buy at each unit price of the good for a particular market of a commodity. A table or graph that displays the price and amount needed to reflect demand is common see the illustration. Following their income, preferences, and other factors, individual consumers choose the most desirable quantity of each good, according to demand theory. This is known as constrained utility maximization when demand is bound by income and wealth. Utility in this context refers to the assumed relationship between each consumer's preferences for various product bundles. According to the law of demand, the relationship between price and quantity requested in a particular market is often inverse. In other words, individuals would be willing to buy less of a product other factor remaining the same the higher its price. Consumers shift away from relatively more expensive things as the price of a commodity decreases the substitution effect. A further benefit of the price drop is an increase in purchasing power the income effect. A rise in income, for instance, will cause the demand curve for a typical good to move away from the origin, as shown in the image. Most determinants are treated as constant forces affecting supply and demand.

The relationship between the quantity of a good available for purchase at a certain price and its price is known as supply. An illustration of the relationship between price and quantity delivered can be a table or graph. Producers, like commercial enterprises, are assumed to be profit maximizers, which means they make an effort to produce and offer the maximum number of commodities to maximize their profits. If other elements remain constant, supply is often depicted as a function connecting price and quantity. In other words, producers will supply more of the good, as shown in the picture, the higher the price at which it may be sold. It is profitable to increase output because of the increased pricing. The position of the supply can fluctuate, just like it might on the demand side, for example, due to a change in the cost of a production input or a technical advancement. The Law of Supply states that, typically, a rise in price causes an expansion in supply and a decline in price causes a reduction in supply. The factors that determine supply, such as the cost of production, the technology used, and the price of alternatives are all assumed to remain constant for the duration of the supply evaluation.

The supply and demand curves in the above picture intersect at this point, which represents the market equilibrium, where the quantity supplied equals, the quantity demanded. A shortfall of quantity supplied compared to the amount required exists at a price below equilibrium. This is supposed to drive up the price. There is an excess of quantity supplied relative to the amount sought at a price above equilibrium. The price is lowered as a result. According to the supply and demand model, price and quantity will stabilize at the point where the amount provided and quantity wanted are equal for the given supply and demand curves. Similar to this, a change in supply or demand as seen in the figure is predicted by the demand-and-supply theory. The point on the demand curve represents the value, or marginal utility, to consumers for a given unit of a consumer good. It gauges how much the consumer is willing to spend on that product. The corresponding point on the supply curve represents marginal cost, which is the rise in the supplier's overall cost for the relevant unit of the good.

Supply and demand work together to set the price at equilibrium. Supply and demand equal marginal cost and marginal value at equilibrium in a market with perfect competition. Some production parameters are characterized as relatively flexible in the short run on the supply side of the market, which has an impact on the price of adjusting output levels. Electrical power, raw material inputs, as well as overtime and temporary labor, can all readily have their consumption rates modified. Other inputs, such as plant, equipment, and essential staff, are largely fixed. All inputs may eventually be changed by management. These discrepancies translate to variations in the supply curve's elasticity responsiveness in the short and long terms, and consequent variations in the price-quantity change resulting from a change in the supply or demand side of the market. According to marginality theories like the one mentioned above, producers try to maximize profits within their restrictions, such as the demand for the items they create, technology, and the price of inputs, while consumers try to achieve their most favored positions within the constraints of their income and wealth.

When the marginal utility of a good, net of price, reaches zero for the customer, there is no longer any net advantage from increasing consumption. Comparing marginal revenue, which is the same as the price charged by the ideal competition, to the marginal cost of a good and marginal profit, which is the difference, is analogous. Production of the good ceases to increase after the marginal profit hits zero. Price and quantity also alter at the margin: more-or-less of something rather than necessary all-or-nothing, for movement to market equilibrium and changes in equilibrium. The distribution of revenue among the production elements, such as labor and capital, via factor markets, is another application of demand and supply. The amount of labor employed and the cost of labor the wage rate, for instance, rely on the supply of labor from potential workers and the demand for labor from employers for output.

To understand patterns and variations in salaries and other forms of labor income, labor mobility, employment, productivity through human capital, and related public policy issues, labor economics looks at how employees and employers interact in such marketplaces. The demand-and-supply analysis is used to explain how perfectly competitive markets behave, but it may also be used in other kinds of markets as a benchmark for comparison. It can also be applied more broadly to explain factors that affect the entire economy, such as total output which is calculated as real GDP and the general level of prices, which are topics covered in macroeconomics. It is a common exercise in practical economics to trace the qualitative and quantitative consequences of variables that alter supply and demand, whether in the short or long run. Economic theory may also outline circumstances under which the market's supply and demand functions as an effective resource allocation system.

III. CONCLUSION

Understanding and analyzing the actions of specific clients, businesses, and markets is a crucial function of microeconomics. It offers helpful insights into economic phenomena at a detailed level because of its emphasis on the laws of supply and demand, market equilibrium, and decision-making processes. Microeconomics offers a wide range of benefits. By giving firms a grasp of market dynamics and consumer behavior, it aids in the strategic decision-making process for pricing, production, and market strategies. Assuring effective resource allocation and advancing economic well-being, microeconomics also aids policymakers in developing and accessing economic policies. Additionally, people can use microeconomic principles to maximize their utility and accomplish their financial objectives by making educated decisions in personal finance.

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