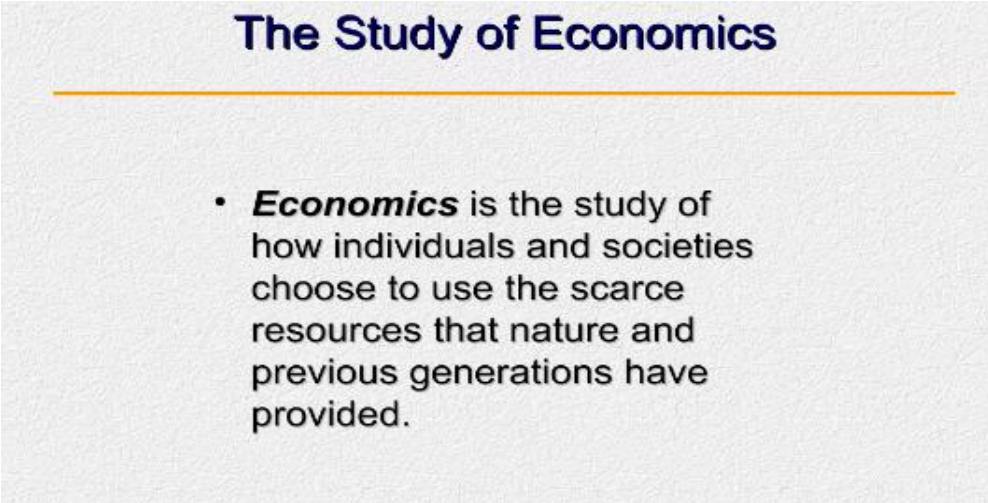
Economics

Economics is the study of scarcity and how it affects the use of resources, the production of goods and services, the growth of production and well-being over time, and many other important and complicated issues that affect society.



What is economics all about?

Economics is the study of how things are made, moved around, and used. It looks at how people, businesses, governments, and countries choose to use their resources. Economics is the study of how people act, based on the idea that people act rationally and try to get the most value or benefit. Economics is the study of how work and business are run. Since there are many ways to use human labour and many ways to get resources, it is the job of economics to figure out which ways produce the best results.

In general, economics can be broken into two parts: macroeconomics, which looks at how the economy works, and microeconomics, which looks at how people and businesses work.

Scope for Economics

- Economics analyzes how economic agents satisfy their unlimited wants by carefully using their relatively limited resources.
- The importance of economics is that it helps society satisfy its needs in the best way possible.
- The four steps of economics are description, analysis, explanation, and prediction.

- Economics involves microeconomics and macroeconomics. Microeconomics studies the economy in terms of an individual or a company. On the other hand, macroeconomics studies economies in terms of the country as a whole.
- Economists are concerned with making sure that demand matches supply. If this happens, they successfully satisfy the unlimited wants in the best way possible.

Varieties of Economics

There are two main ways to learn about economics.

Microeconomics looks at different parts of human behavior to figure out how people react to changes in prices and why they want certain things at certain prices. Microeconomics tries to explain why and how different things have different values, how people make financial decisions, and how they can trade, work together, and cooperate in the best way. Microeconomics looks at how supply and demand change over time and how well things are made, and how much they cost. It also looks at how people divide and share work, set up and run businesses, and deal with uncertainty, risk, and strategic game theory.

Macroeconomics looks at the economy as a whole, both nationally and globally. It does this by stimulating the economy with a lot of data and variables from the economy. It could be a certain part of the world, a country, a continent, or the whole world. It mostly looks at how economies grow, change, and go through cycles. Foreign trade, government fiscal and monetary policy, unemployment rates, inflation and interest rates, the growth of total production output as shown by changes in Gross Domestic Product (GDP), and business cycles that cause expansions, booms, and recessions are all looked at.

Basis	Microeconomics	Macroeconomics
Meaning	Microeconomics is that part of economic theory which studies the behaviour of individual units of an economy.	Macroeconomics is that part of economic theory which studies the behaviour of aggregates of the economy as a whole.
Tools	Demand and Supply.	Aggregate Demand and Aggregate Supply.
Basic Objective	It aims to determine price of a commodity or factors of production.	It aims to determine income and employment level of the economy.
Other Name	It is also known as 'Price Theory'.	It is also known as 'Income and Employment Theory'.
Examples	Individual income, individual output.	National Income, National output.

(Any 2 points of difference + any 1 Example)

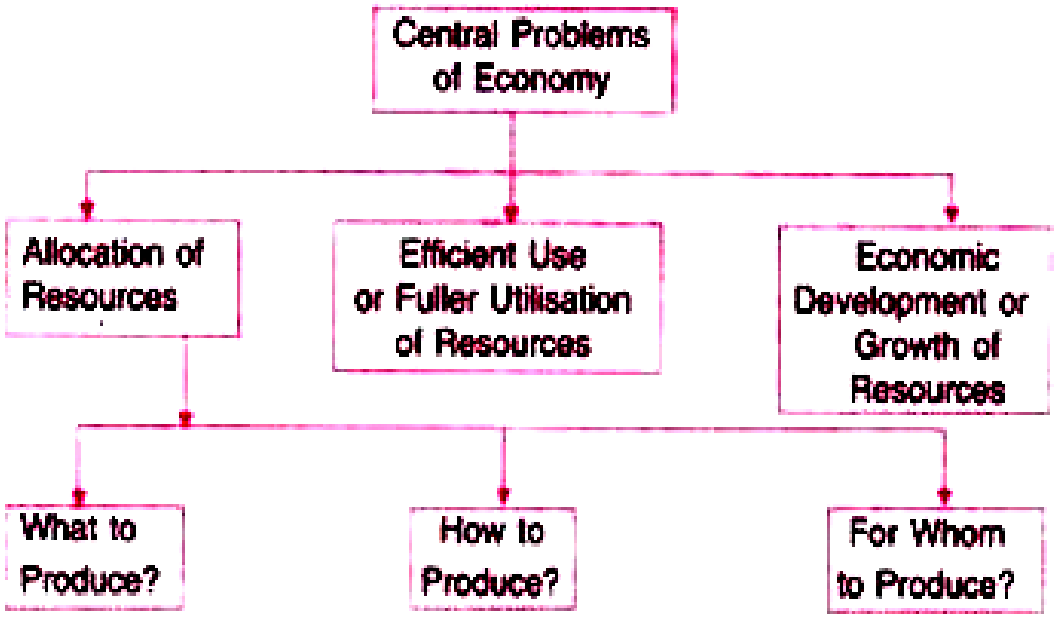
Economic Problem

An economic problem means the problem of making choices occurs because of the scarcity of resources. It arises because people have unlimited wants, but the means to satisfy them are limited.

Causes or Reasons for Economic Problems

- Scarcity of Resources
- Unlimited Human Wants
- Alternate Uses

Central Problems of an Economy



1. Allocation of resources, apportionment of productive assets among different uses. Resource allocation arises as an issue because the resources of a society are in limited supply, whereas human wants are usually unlimited, and because any given resource can have many alternative uses.

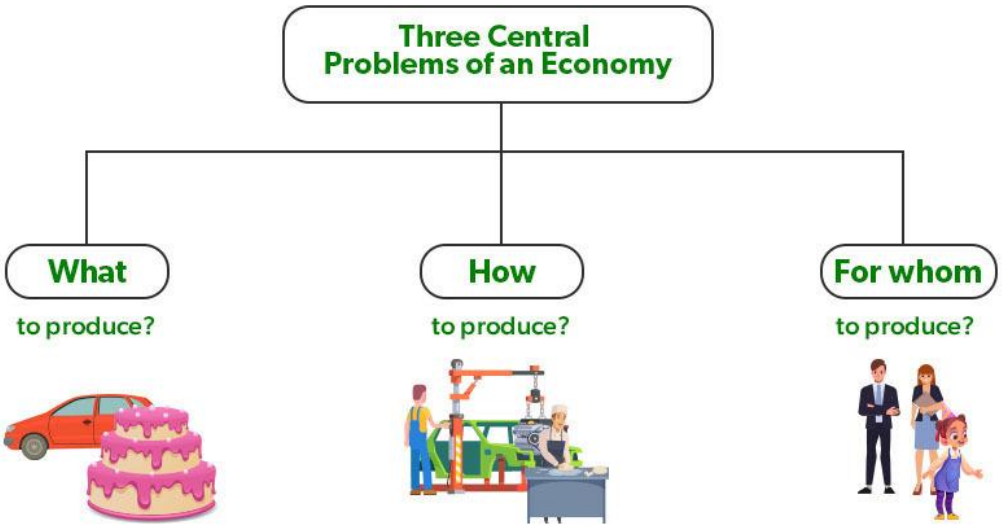
A number of activities happen around us in our daily life, such as activities performed in shops, offices, hospitals, etc. The collection of these organization and institutions is known as an **economy.** These units allow human beings to earn and simultaneously help them to produce goods and services for their use. An economy provides living to the people by making the use of available resources for the production of goods and services according to human wants. To do so, an economy undertakes three economic activities; viz., Production, Distribution, and Disposition.

As mentioned earlier, the three basic economic activities performed in an economy are Production, Distribution, and Disposition. While performing these activities, every economy has to face the issue of scarcity of resources, as the resources available are limited and human wants are unlimited. Therefore, it becomes essential to decide on how to allocate the available scarce resources, leading to the three Central Problems of an Economy:

1. What to Produce
2. How to Produce
3. For Whom to Produce

These three basic problems of an economy are known as the central problems. Every other economic problem revolves around the three central problems.

The three central problems of an economy are discussed below:



What to Produce?

With limited resources, an economy cannot produce all goods and services. It has to choose among the different goods and services. Therefore, the first central problem of an economy includes selecting goods and services to produce and the number of units or quantity of each commodity to be produced. **For example**, a farmer has to choose between different crops as to which he should grow on one piece of land. He can decide to grow one crop on the whole land or grow crops of different proportions.

There are two aspects of the problem of **What to Produce.** These aspects are as follows:

1. **What possible commodities to produce:** The first aspect of the problem of 'What to produce' is deciding which commodities to be produced in an economy. It means that an economy has to choose between different consumer goods (clothes, wheat, etc.) and capital goods (machinery, etc.) to produce. Similarly, it has to choose between different war goods (tanks, guns, bullets, etc.) and civil goods (milk, bread, butter, etc.).
2. **How much to produce:** Once the economy has decided the commodity to be produced, it has to decide the quantity of each selected commodity to be produced. Simply put, it means deciding the quantity of each selected consumer good, capital good, civil good, and war good to be produced in an economy.

As the two aspects of the first central problem of an economy are What possible commodities to produce and How much to produce, it is also known as **What to Produce and in What Quantity.** This problem can be solved by allocating the resources of an economy in a way that provides maximum aggregate satisfaction to society.

How to produce?

After deciding what to produce, another central problem of how to manufacture the goods and services arises. It involves selecting a technique of production from among different techniques. Usually, there are two techniques of production, **Labour Intensive Techniques (LIT)** and **Capital Intensive Techniques (CIT)**. The former technique involves more use of labour, and the latter involves more use of machines. An organization can decide the technique based on different factors like the nature of the product, size of the market, size of the location, budget, etc. **For example,** a poor farmer can adopt labour-intensive techniques as they are cheap. However, a rich farmer can adopt capital-intensive techniques as he can afford to purchase machines.

While selecting the technique of production, an economy aims at raising the standard of living of people and providing employment to everyone. **For Instance,** labour Intensive Techniques are preferred in countries like India as labour is found in abundance in these countries. However, Capital Intensive Techniques are preferred in countries like the USA as capital is found in abundance in these countries.

The problem of **How to Produce** can be solved by combining the factors of production of an economy in a way that it can produce maximum output at minimum cost by using the least possible scarce resources.

For whom to produce?

The last central problem of an economy after deciding what and how to produce is **For Whom to Produce**. As an economy cannot satisfy the needs and wants of every individual of the society, it has to make a decision for whom to produce a commodity and service. Simply put, it involves deciding who should get how much of the goods and services, i.e., how much production should be done for the poor and how much for the rich. **For example**, an organization can decide to produce necessity goods for the poor section of society. However, another firm can decide to produce luxury goods for the rich section of society.

As every economy has scarce resources and cannot fulfill every want of people, it faces the problem of choice between different sections of society. Hence, an economy produces goods for those people who can pay for them which depend on their income level. It means that the problem of 'for whom to produce' is concerned with the income distribution among the different factors of production (like capital, land, labour, and enterprise) which contribute to the production process.

The problem of **For Whom to Produce** can be classified under two main heads **Personal Distribution** and **Functional Distribution.**

1. **Personal Distribution:** It tells us about how an economy distributes its national income among different groups of people.
2. **Functional Distribution:** Functional Distribution means deciding the share of different factors of production in a country's total national product. (land, labour, capital & entrepreneur.)

The problem of **For Whom to Produce** can be solved by making sure that the urgent wants of each productive factor of the society are fulfilled to the maximum possible extent.

2. Full Utilization of Resources

The other central problem of an economy relates to full utilization of resources- land, labour, capital. If all the resources in the economy are fully employed, then the quantity of one commodity can be increased only by forgoing some quantity of the other. This happens when production takes place efficiently. But in reality, most of the time production does not take place efficiently. The factors are not fully employed and the production is below the optimum capacity of economy. You must have seen some of your family members or friends who are unemployed despite being educated. Similarly in our agricultural land we still grow only one crop in a year. This is not a good sign, as the resources are already scarce. If these scarce resources are also not utilized fully, it is wastage of resources. Thus it is the duty of an economy to ensure that the scarce resources do not remain unutilized or under-utilised.

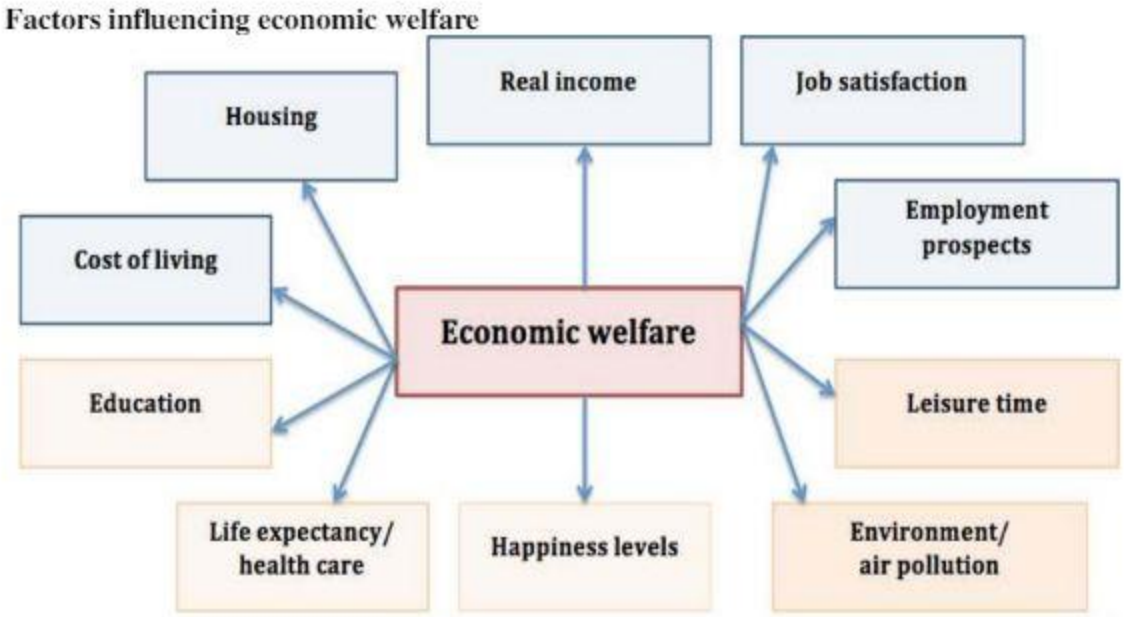
3. Growth of Resources

If resources like labour, capital and technology grow over a period of time, the problem of scarcity can be addressed. Thus, for the growth of any economy, the resources available to the economy should grow. It is only through the effective growth of resources that a society can enjoy a higher standard of living. This is how the countries have developed. If the resources have failed to grow, the countries continue to be underdeveloped. Thus, the economies should make efforts so that their resources grow gradually to meet the growing needs.

ECONOMIC AS A SOCIAL WELFARE MAXIMIZATION

Think of economics like a tool that helps make sure everyone in a community has a fair chance to live a good life. It's like a game where we all have limited resources, but we want to use them in the best way possible. Economics helps us figure out how to share things like money, jobs, and services so that more people can have what they need to be happy and healthy.

For example, if some people don't have enough money to buy food or go to the doctor, economics helps us create programs that can give them a little extra help. It's like making sure no one is left behind and that everyone gets a fair shot at a decent life.



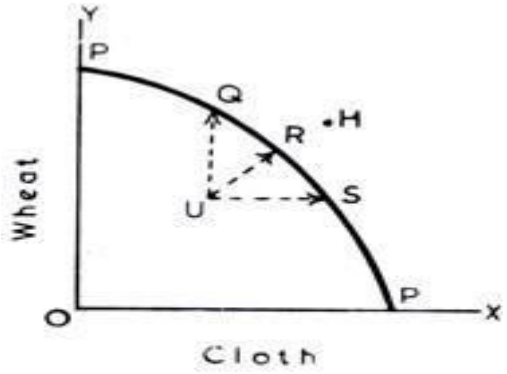
1. **Real income** – influencing potential consumption(basic income/salary/wages for their livelihood)
2. **Employment prospects** – unemployment significant cost (provide employment opportunities by govt.)
3. **Job satisfaction** – satisfaction at work as important as income and wage
4. **Housing** – High income but unaffordable housing diminishes economic welfare. Good, cheap housing essential to economic welfare. (like DDA flats)
5. **Education** – opportunities to study through lifetime, influence welfare (provide free & compulsory education).
6. **Life expectancy and quality of life** – access to healthcare, also are lifestyles healthy, e.g. levels of obesity/smoking rates.
7. **Happiness levels** – normative judgements on whether people are happy.
8. **Environment** – economic growth can cause increased pollution, which damages health and living standards.
9. **Leisure time** – high wages due to working very long hours diminishes economic welfare. Leisure has economic value. (in free time employees do activities like traveling, hiking, arts etc.)

PRODUCTION POSSIBILITY CURVE

The Production Possibilities Curve (PPC) also known as Production Possibilities Frontier (PPF), is a part of macroeconomics and business analysis that plays an important role in a country's as well as a company's economic affairs. The curve can be used to demonstrate and speculate a country's or company's economy and what should be or can be produced with the available resources.

The PPC is drawn to illustrate all possible combinations of two goods that can be produced within the limitation of scarce resources. By graphing the PPC, one can easily determine whether the resources are being used efficiently or not.

Production possibility	Production of wheat	Production of rice
A	100	0
B	90	10
C	70	20
D	40	30
E	0	40

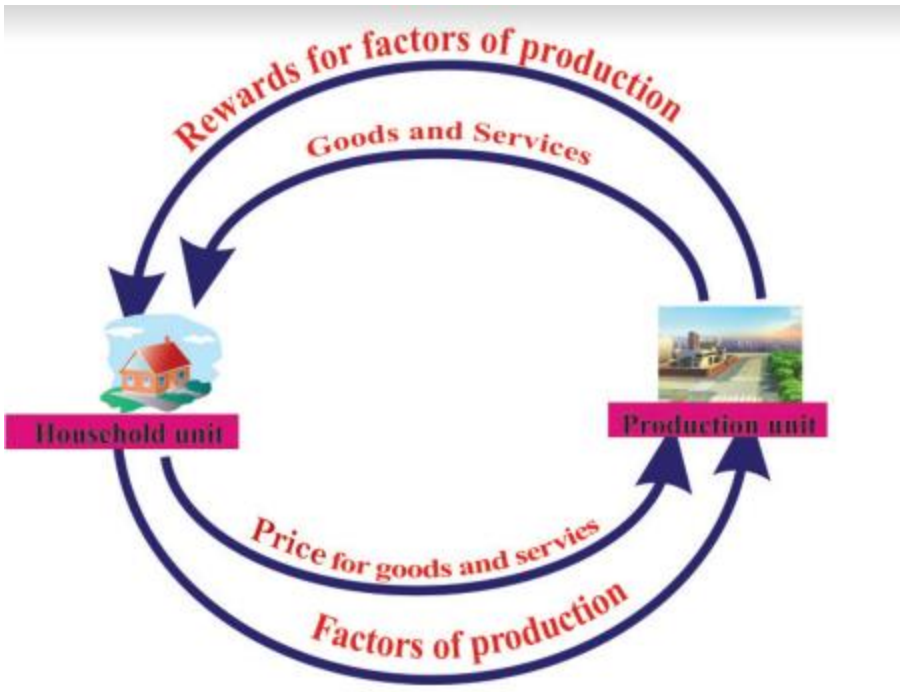


Problem of Under-Utilisation of Resources

Fig. 21.3

All market economies are characterized by a circular flow of economic activity. This means that money and products (including the products businesses need to operate) move in a circular fashion between businesses and households.

Circular flow of economic activities:



The circular flow model illustrates how market forces determine the overall shape of the economy. Businesses and households act as both buyers and sellers in the economy. Businesses sell products to households in exchange for money, and households sell products called the factors of production (land, labor, and capital [money and equipment], the resources required to do business) to businesses.

The inner circle of the model shows products and services moving clockwise between businesses and households.

The outer circle of the model shows income (money) moving counterclockwise between businesses and households.

Demand

Demand simply means a consumer's desire to buy goods and services without any hesitation and pay the price for it. In simple words, demand is the number of goods that the customers are ready and willing to buy at several prices during a given time frame. Preferences and choices are the basics of demand, and can be described in terms of the cost, benefits, profit, and other variables.

The **demand curve** is a graphical depiction of the association between the price of a commodity or the service and the number demanded for a given time frame.

Determinants of Demand

- **Product cost:** Demand of the product changes as per the change in the price of the commodity. People deciding to buy a product remain constant only if all the factors related to it remain unchanged.
- **The income of the consumers:** When the income increases, the number of goods demanded also increases. Likewise, if the income decreases, the demand also decreases.
- **Prices of related goods or services**

  - *Complementary products* – An increase in the price of one product will cause a decrease in the quantity demanded of a complementary product. Example: Rise in the price of bread will reduce the demand for butter. This arises because the products are complementary in nature.
  - *Substitute Product* – An increase in the price of one product will cause an increase in the demand for a substitute product. Example: Rise in price of tea will increase the demand for coffee and decrease the demand for tea.

- **Consumer expectation:** High expectation of income or expectation in the increase in price of a good also leads to an increase in demand. Similarly, low expectation of income or low pricing of goods will decrease the demand.
- **Buyers in the market:** If the number of buyers of a commodity is more or less, then there will be a shift in demand.

The Law of Demand

The law of demand is interpreted as **'**the quantity demanded of a product comes down if the price of the product goes up, keeping other factors constant.**'** In other words, if the cost of the product increases, then the aggregate quantity demanded decreases. This is because the opportunity cost of the customers increases that leads the customers to go for any other substitute or they may not purchase it. The law of demand and its exceptions are really inquisitive concepts.

Exceptions of law of demand

Giffen goods:

Giffen Goods was conceptualised and presented by Sir Robert Giffen. Godrej goods are products that are substandard or inferior goods when compared to luxury products. In any case, the remarkable feature of Giffen goods is that as the cost increases, the quantity demanded will also increase. Also, this component is the thing that makes it an exemption for the law of interest.

Price change expectations:

There are times when the cost or price of an item, product, or service increases, and the economic situations are such that products or services might become more costly. In such cases, purchasers might purchase a greater amount of these items before the cost builds any further.

Therefore, when there is a drop in price or value or expected to drop further, the end consumers may defer or postpone the buy to profit from the advantages of a lower cost.

Essential or necessary products and services:
One more exception case for the law of demand is the essential or necessity goods and products. Individuals will keep on purchasing necessities, for example, medications or essential staples like salt, rice, and sugar, regardless of whether the cost increases. The costs of these items don't influence the quantity demanded.

Change in income:
There will be a change in the behavioural purchase of goods and services according to the changes in personal income. Assuming that a family's personal disposable income increases, they might buy more items independent of the rise in their cost, in this way increasing the quantity demanded of the item. Essentially, they may defer purchasing an item regardless of whether its cost lessens, assuming their personal disposable income has decreased. Henceforth, a change in an end consumer's income may likewise be an exemption for the law of demand.

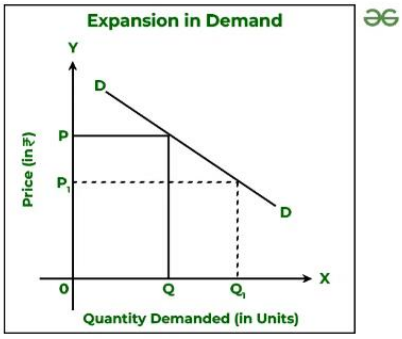
Luxury goods:
The consumption of luxury goods and services doesn't cease even if the price of a certain product or service increases. For example, gold, real estate, etc.

Changes in taste, preferences, and fashionable products:
Consumers' changes in taste and preferences in fashionable products don't change the quantity demanded with an increase in price rise as the consumers are willing to spend more on these products and services.

Change in quantity demanded or movement along demand curve

Expansion in Demand
When there is an increase in the quantity demanded of a commodity because of a fall in its price by keeping other factors constant, it is known as an Expansion in Demand. In simple terms, the demand for a commodity rise because of a fall in its price. Expansion in demand results in a downward movement along the same demand curve.

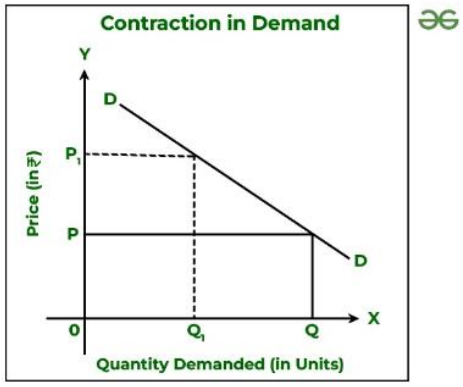
Price (₹)	Quantity (Units)
10	150
8	200



Contraction in Demand

When there is a fall in the quantity demanded of a commodity because of an increase in its price by keeping other factors constant, it is known as Contraction in Demand. In simple terms, the demand for a commodity fall because of an increase in its price. Contraction in demand results in an upward movement along the same demand curve.

Price (₹)	Quantity (Units)
10	150
15	100

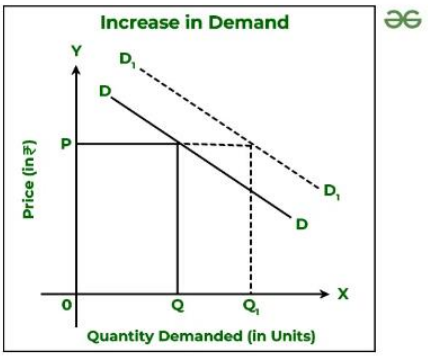


Change in demand

Increase in Demand

When there is an increase in the quantity demanded of a commodity because of any factor other than the price of the commodity, it is known as an Increase in Demand. In simple terms, the demand for a commodity increases at the same price, because of changes in other factors. Increase in demand results in a rightward shift in the demand curve.

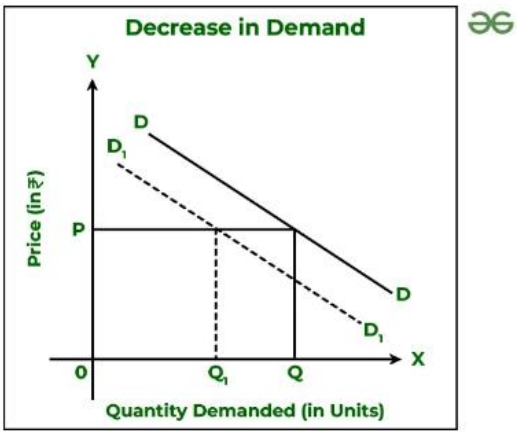
Price (₹)	Quantity (Units)
10	150
10	200



Decrease in Demand

When there is a fall in the quantity demanded of a commodity because of any factor other than the price of the commodity, it is known as Decrease in Demand. In simple terms, the demand for a commodity decreases at the same price, because of changes in other factors. A decrease in demand results in a leftward shift in the demand curve.

Price (₹)	Quantity (Units)
10	150
10	100



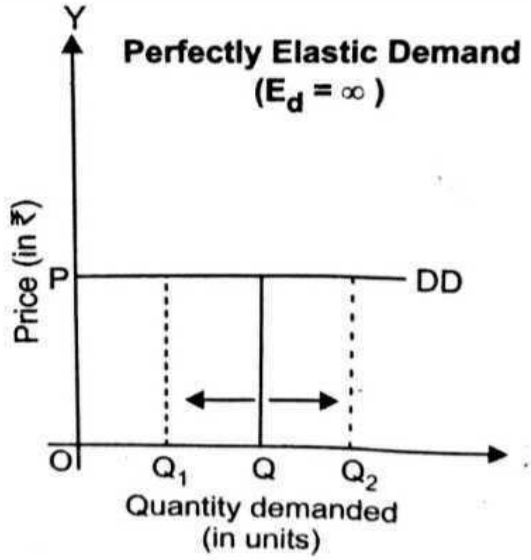
Elasticity of Demand

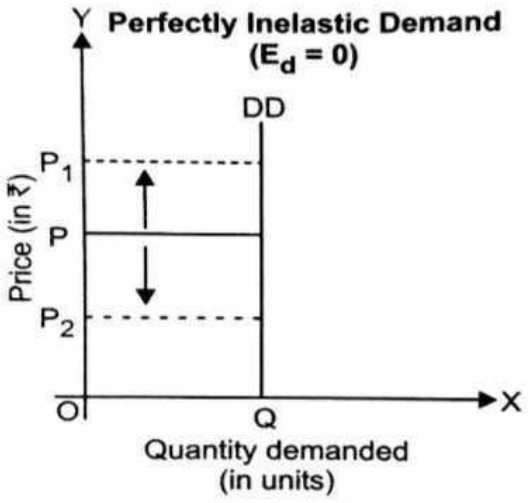
The concept of price elasticity of demand (PED) is crucial in economic demand law. It is a measure of how price changes affect a product's demand. In other words, price elasticity of demand (PED) is a method for determining consumer responsiveness to price fluctuations, as opposed to price elasticity of supply, which determines supply responsiveness to price.

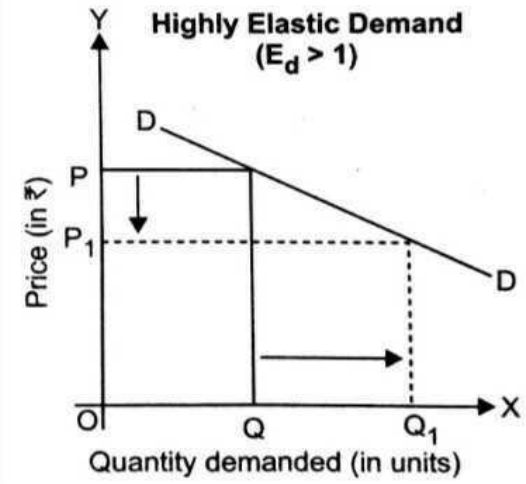
$$Ed = \frac{\%\ \text{change in Demand}}{\%\ \text{change in Price}}$$

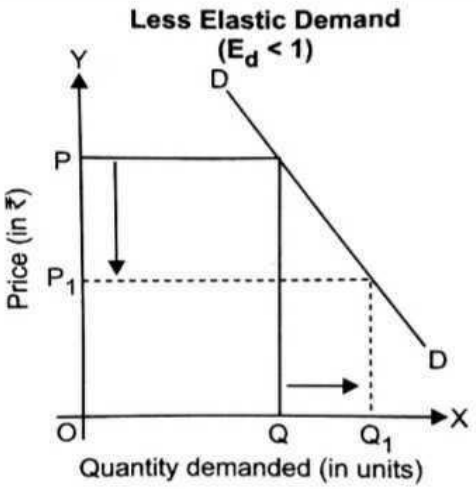
Different types of Price elasticity of demands;

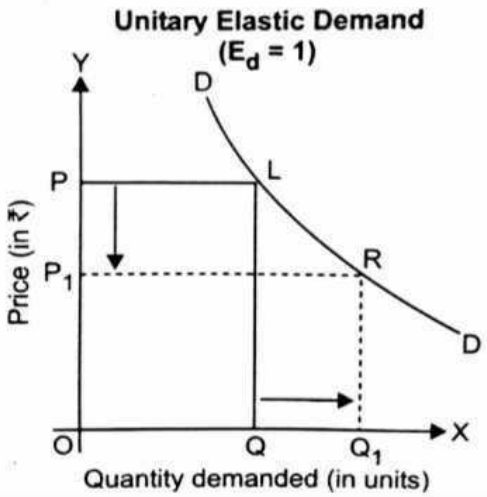
1. **Perfectly Elastic Demand:** Perfectly elastic demand occurs when a minor change in the price of a product produces a large change in its demand. In the case of completely elastic demand, a tiny increase in price leads to a drop in demand to zero, whereas a small decrease in price generates an increase in demand to infinity. (Ed= infinity)
2. **Perfectly inelastic Demand:** Completely inelastic demand occurs when there is no change in a product's demand in response to a price adjustment. The numerical value for perfectly inelastic demand (Ed=0) is zero.
3. **Highly Elastic Demand:** Highly elastic demand occurs when the proportionate change in demand exceeds the corresponding change in the price of a product. Relatively elastic demand has a numerical value ranging from one to infinity. (Ed>1)
4. **Less elastic Demand:** less elastic demand occurs when the percentage change in demand created is smaller than the percentage change in a product's price. For example, if the price of a product rises by 30% and demand falls by only 10%, the demand is said to be relatively inelastic. The numerical value of moderately elastic demand (ep1) varies from zero to one. Marshall defines moderately inelastic demand as elasticity less than one. (Ed<1)
5. **Unitary Elastic Demand:** When a proportionate change in demand results in the same change in product price, the demand is said to be unitary elastic. Unitary elastic demand has a numerical value of one (Ed=1).


Perfectly Elastic Demand
($E_d = \infty$)
Y
Price (in ₹)
P
DD
O
Q_1
Q
Q_2
Quantity demanded
(in units)


Perfectly Inelastic Demand
($E_d = 0$)
Y
DD
P_1
P
P_2
Price (in ₹)
O
Q
X
Quantity demanded
(in units)


Highly Elastic Demand
($E_d > 1$)
Y
D
P
P_1
D
Price (in ₹)
O
Q
Q_1
X
Quantity demanded (in units)


Less Elastic Demand
($E_d < 1$)
Y
D
P
P_1
D
Price (in ₹)
O
Q
Q_1
X
Quantity demanded (in units)


Unitary Elastic Demand
($E_d = 1$)
Y
D
L
P
R
P_1
D
Price (in ₹)
O
Q
Q_1
X
Quantity demanded (in units)

Varieties of Elasticity of demand

A variety of factors, including price, income, and preference, influence the quantity demanded of a good or service.

Price elasticity of demand is an economic measure of how sensitive demand is to price changes. The measurement of price elasticity of demand is the change in quantity demanded due to a change in the price of a good or service.

Income elasticity of demand

Income elasticity of demand refers to the sensitivity of the quantity demanded of a specific good to a change in consumers' real income who buy that good while all other factors remain constant. The income elasticity of demand is calculated by dividing the percent change in quantity demanded by the percent change in income. You can use income elasticity of demand to determine whether a specific good is a necessity or a luxury.

Crossroads of Elasticity

The cross elasticity of demand is an economic concept that measures how responsive the quantity demanded of one good is when the price of another good changes. This metric, also known as cross-price elasticity of demand, is calculated by dividing the percentage change in one good's quantity demanded by the percentage change in the price of the other good.

Supply

Supply refers to the number of products a company is willing to sell at a specific price during a specific period.

Determinants under Theory of Supply

- **Price of the good-** There is a positive relationship between the commodity's supply and price. This indicates that when the price of a commodity rises, so does the supply of that commodity, and vice versa.
- **Prices of other goods-** Assume a company uses its resources to produce multiple products. In order to increase profits, a company produces more of other goods at a higher price than it does of goods whose prices have not changed.
- **Prices of the factors of production-** Because the cost of producing a commodity is determined by the price of factors (rent, wages, interest, and profit), this also affects supply. A commodity's supply curve may shift to the left due to an increase in the price of a factor of production On the other hand, if the prices of factors fall, the supply curve moves to the right, and a producer may be able t sell more of a product at a given price.
- **State of technology-** A company's profit margin will rise as a result of a decrease in production costs as a result of technological advancement, thereby reversing the supply curve. The supply curve will shift to the left if goods are produced with outdated, inferior technology, which raises production costs and lowers total output.
- **Objectives of the firm-** Occasionally, a company may be compelled to increase the supply of a product not because it is more profitable but because the product's supply is a source of market status and prestige. A company may also increase production for the sole purpose of maximizing sales or employment.

Law of supply

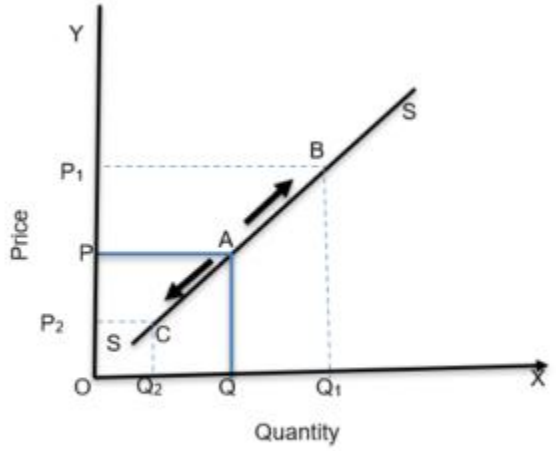
The law of supply shows the direct relationship between the price and quantity offered while other factors remain constant.

Exceptions of the Law of Supply

- **Future expectation**- If future price fluctuations are anticipated, the law will not apply. For instance, sellers would be prepared to sell more, even at low prices, if they anticipate further price declines in the future.
- **Perishable goods**- The availability of perishable products like milk, vegetables, fish, and eggs, among others, is also unaffected by the prices they charge. These items cannot be held for long by sellers.
- **Agricultural goods**- Natural disasters like droughts, floods, and other natural disasters have a greater impact on agricultural product supply with lower prices.
- **Rare Commodities-** The law of supply does not apply to some precious and rare goods as well. This category includes high-quality artistic products and poems written by outstanding poets. Even when their prices rise, there is no way to increase their supply.
- **Underdeveloped countries**- When production and supply cannot be increased due to price increases, backward countries render the law of supply inapplicable. In this case, production-critical resources are lacking.

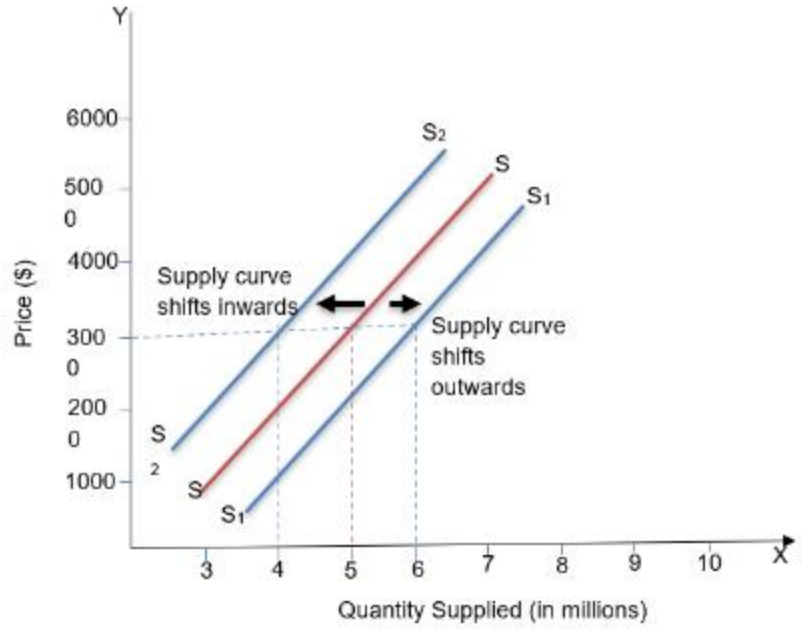
Change in quantity supplied or movement along the supply curve.

Expansion in supply refers to increased supply due to higher commodity prices while other factors remain constant.
Contraction in supply refers to a decline in quantity offered due to a decline in commodity prices, and other factors remain constant.



Change in supply or shift in the supply curve

An **increase in supply** refers to an increase in the supply of goods caused by factors other than the price of the goods.
A **decrease in supply** refers to a decrease in the supply of the cost of goods due to factors other than the own price of the goods.



Elasticity of Supply

The quantitative correlation between the price of a commodity and the quantity supplied of that commodity is known as the elasticity of supply.

Types of elasticity of supply

1. Perfectly Elastic Supply:

If there is infinite elasticity, then it is considered a perfectly elastic supply. In this scenario, with a minor fall in the price level, the supply will become zero and with a minor rise in the price, the supply will become infinite. The perfectly elastic supply example is that in such a market the suppliers desire to supply any quantity of the commodity if there is a higher level of price. A perfectly elastic supply curve is depicted as a straight line that is parallel to X-axis.

2. Unit Elastic Supply:

If the change amount supplied is exactly equal to the change in its price, then it is termed as unit elastic supply or unitary elastic supply. In the above-mentioned scenario, the price elasticity of supply is equal to 1.

3. Relatively Greater-Elastic supply:

Relatively greater elastic supply occurs when the change in supply is relatively greater as compared to the change in price. In this case, the value of price elasticity of supply is greater than 1.

4. Relatively Less-Elastic supply:

Relatively Less Elastic supply occurs when the change in supply is relatively lesser as compared to the change in price. In this case, the value of price elasticity of supply is less than 1.

5. Perfectly Inelastic Supply

A service or commodity is termed as perfectly inelastic when a certain quantity of the said commodity can be supplied irrespective of the price. The value of the price elasticity of supply is zero.

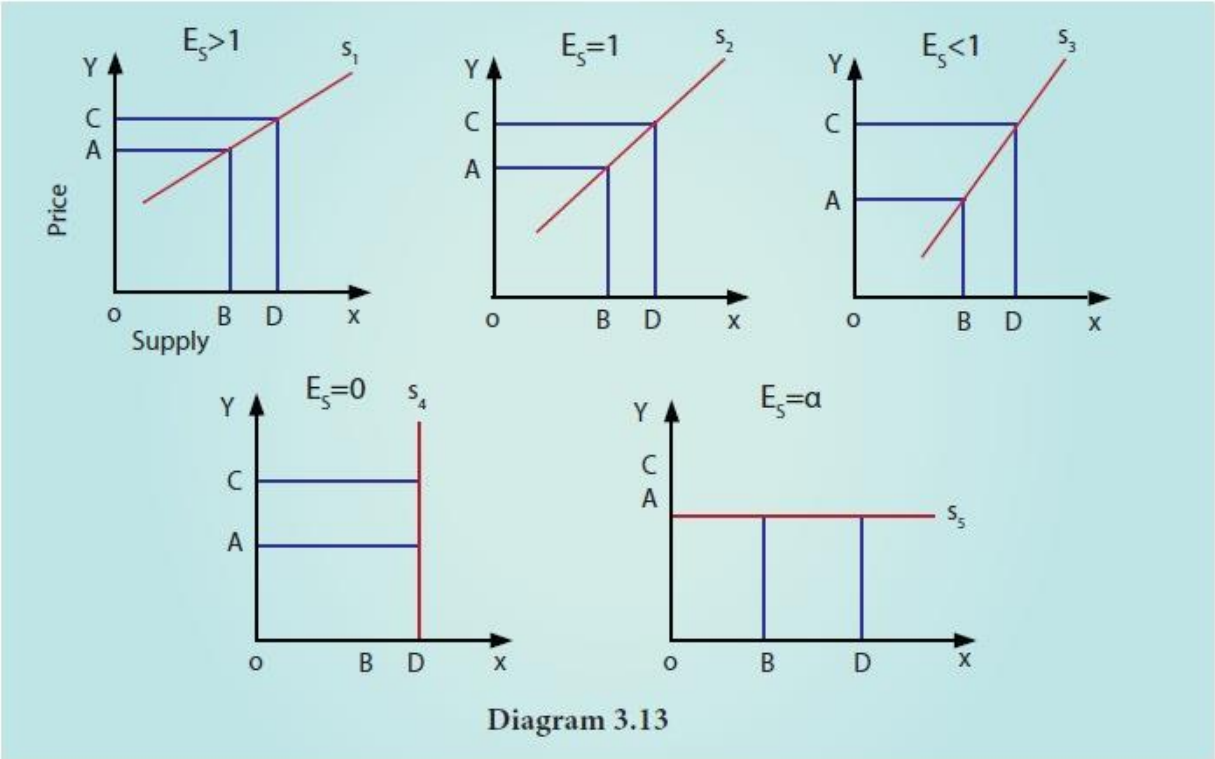


Diagram 3.13

<u>Factors that affect the price elasticity of supply are-</u>

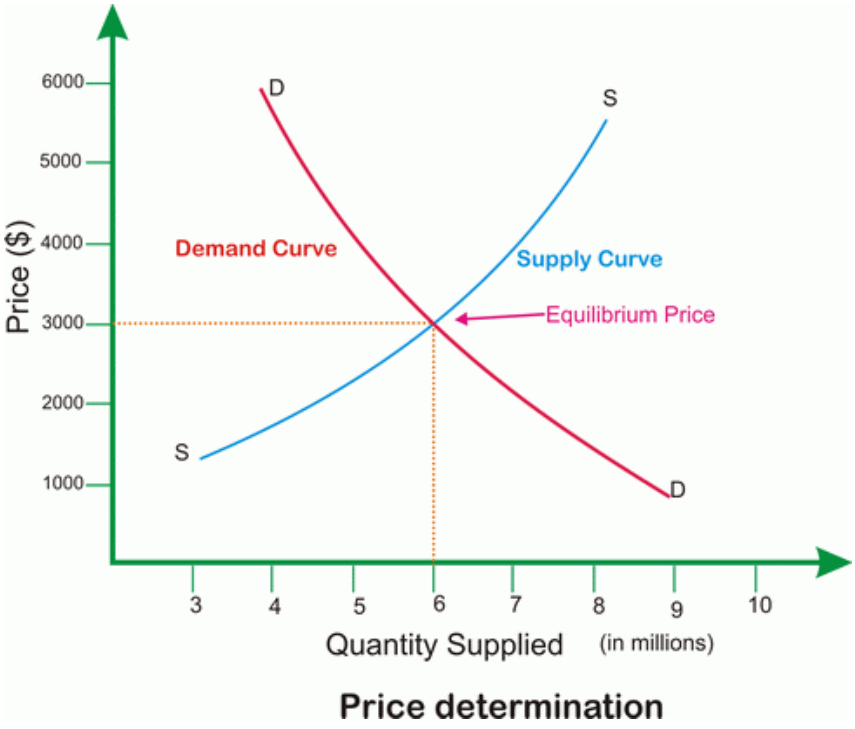
1. The nature of the industry- The nature of the industry under consideration is a very important factor that affects the price elasticity of supply.
2. Nature-constraints- Nature can restrict the supply of some products. For example- It takes 15 years for a rubber tree to grow.
3. Risk-Taking- The willingness to take risks by the entrepreneurs also affect the price elasticity of supply.
4. Nature of goods- Another important factor that can affect the price elasticity is the availability of the products.
5. Definition of commodity- The price elasticity of supply is great if the commodity is defined narrowly.

6. Time- In the long run, supply is considered to be more elastic as compared to that in the short run.

7. The cost of attracting resources- Attracting the resources from the other industries is an important factor to increase the supply

Market Equilibrium

In a competitive market, demand for and supply of a good or service determine the equilibrium price.Equilibrium is achieved at the price at which quantities demanded and supplied are equal. We can represent a market in equilibrium in a graph by showing the combined price and quantity at which the supply and demand curves intersect.



Price determination