MICRO-ECONOMICS
TOPIC- SUPPLY ANALYSIS

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SUPPLY ANALYSIS

Supply refers to the amount of a good or service that the producers/providers are willing and able to offer to the market at various prices during a period of time. There are two important aspects of supply:

- **Supply refers to what is offered for sale and not what is finally sold.**
- **Supply is a flow. Hence, it is a certain quantity per day or week or month, etc.**

DETERMINANTS OF SUPPLY

While the price is an important aspect for determining the willingness and desire to part with goods/services, many other factors determine the supply of a product or service as discussed below:

1. <u>Price of the Good/ Service</u>

The most obvious one of the determinants of supply is the price of the product/service. With all other parameters being equal, the supply of a product increases if its relative price is higher. The reason is simple. A firm provides goods or services to earn profits and if the prices rise, the profit rises too.

2. <u>Price of Related Goods</u>

Let's say that the price of wheat rises. Hence, it becomes more profitable for firms to supply wheat as compared to corn or soya bean. Hence, the supply of wheat will rise, whereas the supply of corn and soya bean will experience a fall.

Hence, we can say that if the price of related goods rises, then the firm increases the supply of the goods having a higher price. This leads to a drop in the supply of the goods having a lower price.

3. <u>Price of the Factors of Production</u>

Production of a good involves many costs. If there is a rise in the price of a particular factor of production, then the cost of making goods that use a great deal of that factors experiences a huge increase. The cost of production of goods that use relatively smaller amounts of the said factor increases marginally.

For example, a rise in the cost of land will have a large effect on the cost of producing wheat and a small effect on the cost of producing automobiles.

Therefore, the change in the price of one factor of production causes changes in the relative profitability of different lines of production. This causes producers to shift from one line to another, leading to a change in the supply of goods.

4. <u>State of Technology</u>

Technological innovations and inventions tend to make it possible to produce better quality and/or quantity of goods using the same resources. Therefore, the state of technology can increase or decrease the supply of certain goods.

5. <u>Government Policy</u>

Commodity taxes like excise duty, import duties, GST, etc. have a huge impact on the cost of production. These taxes can raise overall costs. Hence, the supply of goods that are impacted by these taxes increases only when the price increases. On the other hand, subsidies reduce the cost of production and usually lead to an increase in supply.

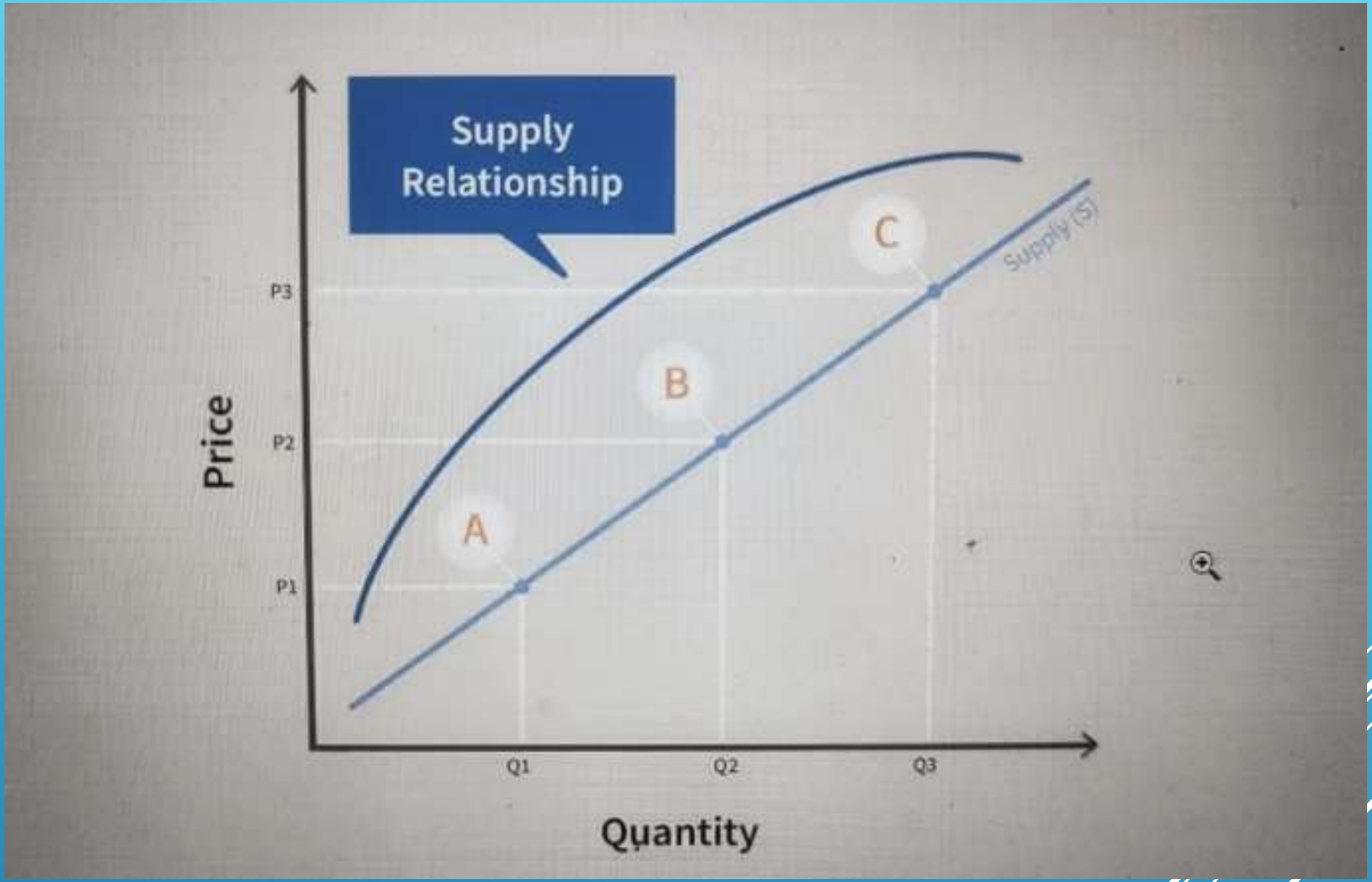
6. <u>Other Factors</u>

There are many other factors affecting the supply of goods or services like the government’s industrial and foreign policies, the goals of the firm, infrastructural facilities, market structure, natural factors etc.

LAW OF SUPPLY

The law of supply is a microeconomic law. It states that, all other factors being equal, as the price of a good or service increases, the quantity of that good or service that suppliers offer will increase, and vice versa.

In plain terms, this law means that as the price of an item goes up, suppliers will attempt to maximize their profits by increasing the number of that item that they sell.



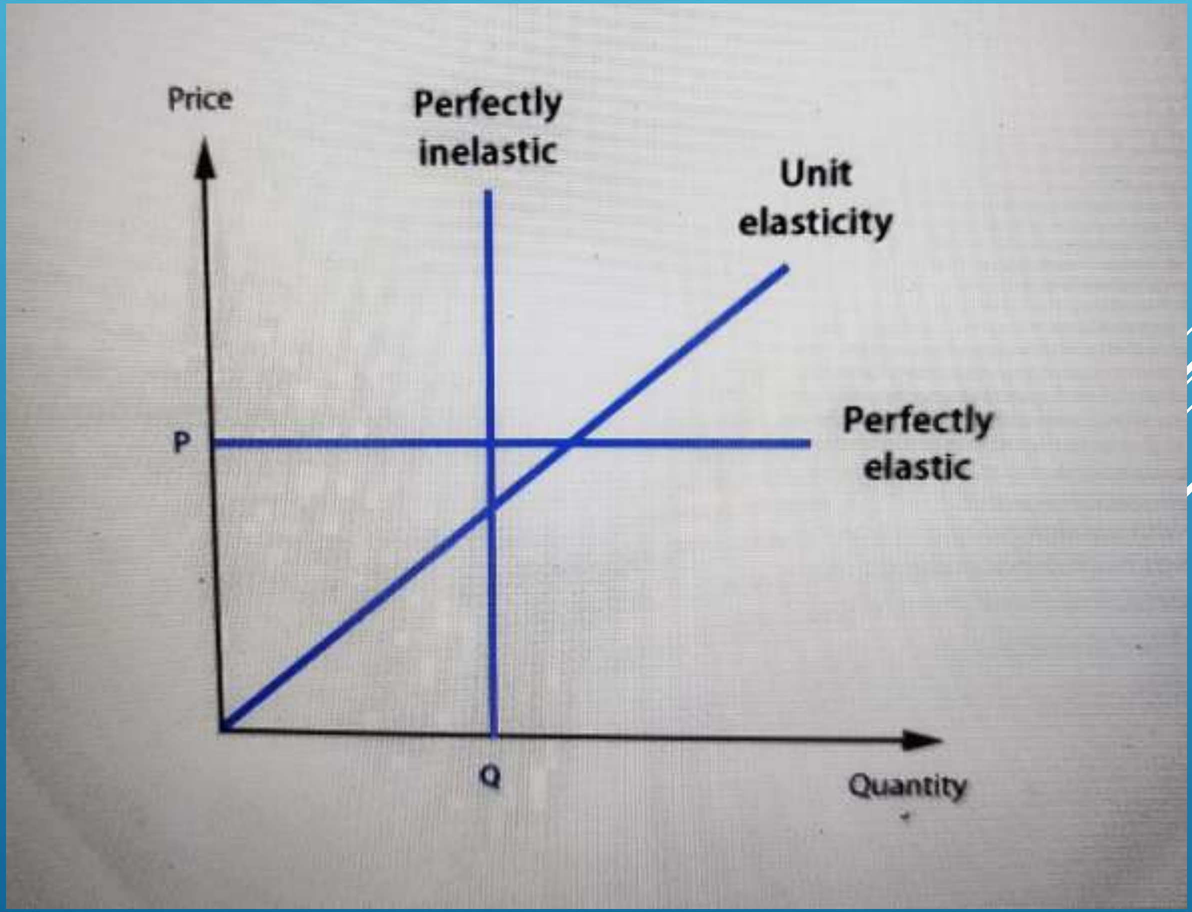
The chart below depicts the law of supply using a supply curve, which is upward sloping. A, B, and C are points on the supply curve. Each point on the curve reflects a direct correlation between quantity supplied (Q) and price (P). So, at point A, the quantity supplied will be Q1 and the price will be P1, and so on.

ELASTICITY OF SUPPLY

The elasticity of supply establishes a quantitative relationship between the supply of a commodity and it's price. Hence, we can express the numeral change in supply with the change in the price of a commodity using the concept of elasticity. Note that elasticity can also be calculated with respect to the other determinants of supply.

However, the major factor controlling the supply of a commodity is its price. Therefore, we generally talk about the price elasticity of supply. The price elasticity of supply is the ratio of the percentage change in the price to the percentage change in quantity supplied of a commodity.

TYPES OF ELASTICITY OF SUPPLY



1. Perfectly Inelastic Supply

A service or commodity has a perfectly inelastic supply if a given quantity of it can be supplied whatever might be the price. The elasticity of supply for such a service or commodity is zero. A perfectly inelastic supply curve is a straight line parallel to the Y-axis. This is representative of the fact that the supply remains the same irrespective of the price.

The supply of exclusive items, like the painting of Mona Lisa, falls into this category. Whatever might be the price on offer, there is no way we can increase its supply.

2. Relatively Less-Elastic Supply

When the change in supply is relatively less when compared to the change in price, we say that the commodity has a relatively-less elastic supply. In such a case, the price elasticity of supply assumes a value less than 1.

3. Relatively Greater-Elastic Supply

When the change in supply is relatively more when compared to the change in price, we say that the commodity has a relatively greater-elastic supply. In such a case, the price elasticity of supply assumes a value greater than 1.

4. Unitary Elastic

For a commodity with a unit elasticity of supply, the change in quantity supplied of a commodity is exactly equal to the change in its price. In other words, the change in both price and supply of the commodity are proportionately equal to each other. To point out, the elasticity of supply in such a case is equal to one. Further, a unitary elastic supply curve passes through the origin.

5. Perfectly Elastic supply

A commodity with a perfectly elastic supply has an infinite elasticity. In such a case the supply becomes zero with even a slight fall in the price and becomes infinite with a slight rise in price. This is indicative of the fact that the suppliers of such a commodity are willing to supply any quantity of the commodity at a higher price. A perfectly elastic supply curve is a straight line parallel to the X-axis.

FACTORS AFFECTING SUPPLY

1. A decrease in costs of production. This means business can supply more at each price. Lower costs could be due to lower wages, lower raw material costs

2. More firms. An increase in the number of producers will cause an increase in supply.

3. Investment in capacity. Expansion in the capacity of existing firms, e.g. building a new factory

4. The profitability of alternative products. If a farmer sees the price of biofuels increase, he may switch to growing crops for biofuels on all his fields and this will lead to a fall in the supply of food, such as wheat.

5. Related supply. If there is an increase in the supply of beef (from cows) then there will also be an increase in the supply of leather.

6. Weather. Climatic conditions are very important for agricultural products

7. Productivity of workers. If workers become more motivated and work hard, then there will be a significant increase in output and supply.

8. Technological improvements. Improvements in technology, e.g. computers or automation, reducing firms costs.

9. Lower taxes. Lower direct taxes (e.g. tobacco tax, VAT) reduce the cost of goods.

10. Government subsidies. Increase in government subsidies will also reduce the cost of goods, e.g. train subsidies reduce the price of train tickets.

11. Objectives of firms. If firms are profit maximisers and collude with other firms, we may see a fall in supply as they try to maximize profits. However, if they switch to targeting sales or revenue maximization, then we will see an increase in supply.

THANK YOU