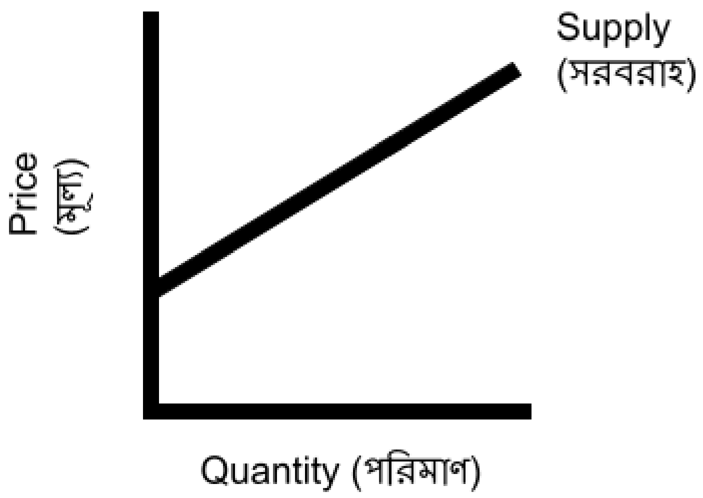
Chapter 4: Supply & Demand (English)

Section 1.1: Understanding Supply



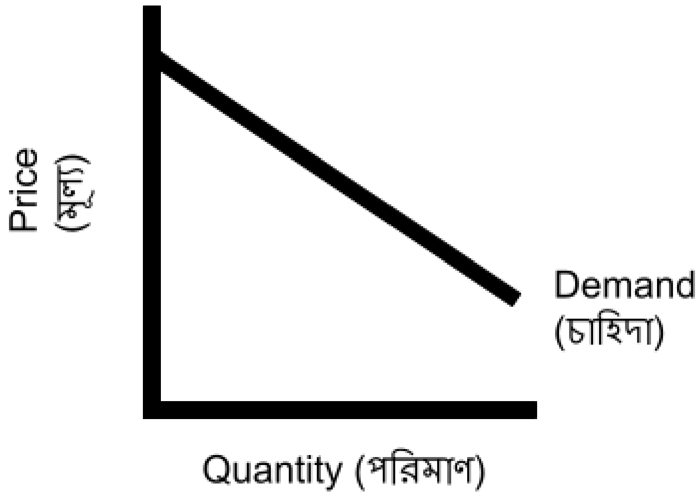
In economics, ‘supply’ is significant as it determines the amount of a product or service that will be offered for sale by consumers at different levels of price. Generally, supply is understood as those quantities of a product that producers are willing and able to offer in the market at different times and at different prices, depending on factors such as anticipated profits, technology, resources, and market characteristics.

The supply curve of a product is generally positive sloped which signifies the law of supply i.e. with an increase in the price of a certain good; the volume of goods supplied rises. There are reasons why this kind of relationship happens; since their prices are high, then it becomes feasible to compensate for the high costs that are involved in producing more, and it also enables higher returns and profit targets for the producers and therefore gives an incentive to increase.

There are some key variables that are called supply determinants that can affect this supply. These include production costs, technology, government policies, and expectations of future prices. For instance the cost of raw materials, labor and energy on the other hand is a key production cost driver. Lowered prices of raw materials or increased production efficiency leads to decreased production costs and therefore allows for more production of goods at lower cost. Because of the increase in the level of production, there is usually an increase in the supply of goods given that the demand stays the same.

For instance the above is true in the oil industry. When the cost of drilling or extraction decreases because of a decrease in the price or improvement in the technology, the oil companies are able to pump more oil at a lower cost meaning their possible supply increases. This variability affects the main oil market and other oil dependent markets or industries in other ways indicating how cost changes of production can alter supply greatly.

Section 1.2: Understanding Demand

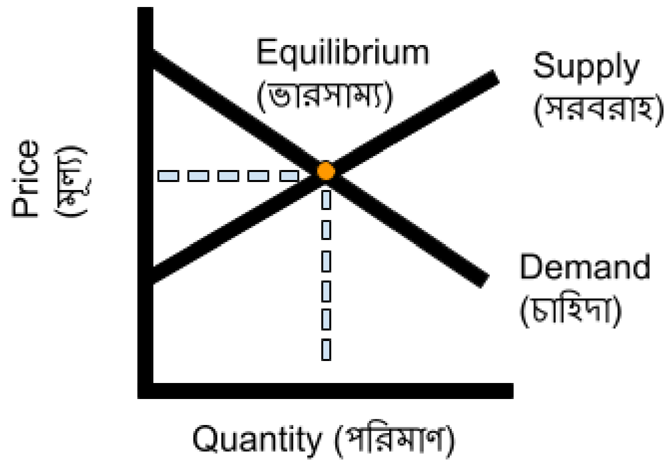


Demand in an economic sense defines the quantity that consumers are willing and able to purchase of a product at different prices. It represents consumers' readiness to purchase specific commodities or services, given their price, level of income and the purchasing decisions they are endowed with. A demand curve is more often than not negatively sloped, the price demand relationship is known as the law of demand, whereby, if the price of a given product is cut, the quantity demanded goes up and vice versa. The demand curve which indicates the inverse relationship between the amount demanded and price level is based on the fact that, when the price of a good is low, a large number of people can afford it, increasing the demand for that good.

Price, however, is not the only factor affecting demand, there are several others. These include, consumer's income, prices of goods, which are substitutes and complements, consumer's preference and taste, prediction of the price in the future, and communication factors. For instance, on the other hand, an increase in consumer income leads to an increase in demand for normal goods because they have power of purchase. On the other hand, if the price of a substitute (tea) is cheaper than the original product (coffee), the demand for coffee may decrease as consumers will start using coffee at a cheaper price.

The launch of new smartphones in the tech industry is arguably the best example of how demand can be influenced. When a substantial upgrade is made to a model and it is priced competitively, that model experiences a significant increase in demand. This increase in demand is not only based on the price of the product but also on the existing demand among consumers for the new technology and new features that come with the model. Such scenarios showcase the myriad of factors that bear on the demand for certain products, emphasizing the sophistication of purchase behavior in a market with competition.

Section 1.3: Supply & Demand Graphs



The intersection of supply and demand curves is a key concept in economics which indicates market equilibrium – an equilibrium price where the amount purchased by consumers is equivalent to the amount supplied by producers. The equilibrium price in this case is important as it allows the market to operate without any superfluous supply (surpluses) or demanding patterns that do not supply sufficient quantities (shortages). At this point the resources are optimally distributed with regard to producers' costs and consumers' values.

Let us discuss in detail how equilibrium can change by using the example of the housing market. Let us say, due to increased size of population or increased income there is an increased demand for houses. This change will make the demand curve shift towards the right indicating increase in quantity demanded at any given price level. If the supply of housing does not increase for the factors of construction or land available then this increase in demand will push the equilibrium point onward on the supply curve to some higher price. This causes an increase in the price of houses.

Conversely, in cases where new technology makes construction cheaper, the supply curve would shift towards the right, that is, more homes could be supplied at cost. This would mean that provided demand remains the same, this shift would result in a new equilibrium frame in the market which is at a lower price which increases access to housing.

In analyzing how the housing market works, this interaction of demand with supply is critical especially in appreciating a number of issues such as the effect of economic policies on the structure, the demographic variation or the influence of technology on the market. These curves are useful and much needed by the economists who are able to make the interpretation of such graphs in terms of forecasts of the possible repercussions of the decisions made with respect to policies or the shock from the environment on a market. For instance, property sales tax could lead to the leftward shift of the Supply curve meaning that in the case where demand does not change, housing property would rise in value. Another example would be the provision of the first, second or third time home buyer grants. These grants would lead to a rightward shift of this demand curve but equilibrium would not be established if the supply does not want to grow as well.

For this reason, the primary purpose of demand-supply graphs is not only to show the current condition of a particular market; instead, it is designed to weigh the possibility of a change in other conditions to allow the equilibrium to be moved in the market. This understanding of how the market and its changes are able to react in response to different forces is crucial in facilitating better decision making in the private sector as well as the public policy framework.

Section 1.4: Fun Facts

- Did you know that the concept of supply and demand was first popularized by Scottish philosopher Adam Smith in the 18th century? Known as the father of modern economics, Smith introduced ideas that laid the foundation for how we understand market economics today.

- Did you know that the world's diamond supply is often controlled to manipulate prices? Major diamond producers have been known to hold back supply to maintain high prices for diamonds, illustrating a real-world manipulation of supply for price control.

- Did you know that during the release of a new highly anticipated product, such as the latest iPhone, economists can observe real-time shifts in supply and demand curves? The initial high demand and limited supply often cause a spike in prices on secondary markets like eBay.

- Did you know that the 1973 oil crisis is a classic example of how political events can shift supply curves dramatically? The OPEC oil embargo against the United States and other countries led to a sudden and significant reduction in oil supply, causing oil prices to quadruple in just a few months.

- Did you know that the introduction of ride-sharing apps like Uber and Lyft significantly shifted the demand curves for traditional taxi services? The convenience and often lower prices of these services have decreased demand for taxis, reshaping urban transportation markets around the world.