The law of supply

Supply refers to the quantity of a product that producers, sellers or firms are both willing and able to offer in the market at a particular price over a period of time (Mabry & Ulbrich, 1989).

The Law of Supply

The law of Supply states that the quantity supplied of a good or commodity has a positive relationship with price; as the price of a commodity rises, producers will increase their supply of goods to the market, ceteris paribus (Blinder & Baulmol, 2000). Ceteris paribus is a Latin term that means everything is unchanged, equal or constant (Tancred Lidderdale, 2003).

A higher market price is necessary to entice a seller to sell more of a product, since the marginal opportunity cost of supplying the good increases as more of the good is produced.

Illustration of supply

Supply can be illustrated using a supply schedule or a supply curve (Tancred Lidderdale, 2003). A supply schedule is a tabloid representation, while a supply curve is a graphical representation of supply. They show how the quantity supplied of a product changes over time as the price of the product changes (Blinder & Baulmol, 2000).

Table 1

Price of Good

Quantity of Good

$ 2

2

$ 6

5

$ 12

8

Table 1: A supply schedule showing the positive relationship between Price and Quantity supplied of a good.

Why does a supply Curve Slope Upwards?

Price Supply

Quantity

Supply curves are drawn from left to right because market price and quantity supplied share a positive relationship; when price increases, quantity supplied will increase simultaneously and in addition when price decreases, quantity supplied will increase simultaneously (Blinder & Baulmol, 2000).

Determinants of Supply & how they affect the supply curve

Other factors, independent of price, that affect quantities supplied are called “ Determinants of Supply” (Mabry & Ulbrich, 1989). A change in any of the determinants of supply will result in a shift of the supply curve. Determinants of supply include:

The number of sellers in the market or size of the industry – Market supply is the sum of the supply schedules of individual producers. When additional firms enter the market for a product the supply of a product increases. This increase in supply of the product causes the supply curve to shift to the

right. Conversely, when firms exit the market for a product, supply of that product decreases. This results in a leftward shift of the supply curve (Blinder & Baulmol, 2000).

Prices of resources – that is the price of inputs such as land, labour, capital, and raw materials that is used to produce goods and services (Tancred Lidderdale, 2003). For instance, a reduction in price of flour may cause a corresponding increase of pastry being supplied on the market, since producers would be inclined to invest in the production of pastry. This can be expressed by a shift in the supply curve to the right. On the other hand, an increase in price of flour may cause a decrease in quantity of pastry being produced. This will cause a shift of the supply curve to the left.

Technology – Advancements in techniques of production may lower or raise production costs (Mabry & Ulbrich, 1989). One example of how it can lower production cost is by replacing typewriters with computers. This saves time and money and results in less wastage. Computers offer a print preview option whereby a document can be corrected before printed on hard copy, while typewriter mistakes can only be undone on the paper using a correction tape. The correction tape cost must be borne by the business. Further, several documents can be prepared on a computer at once as opposed to a typewriter which can only produce one document at a time. This will effect a rightward shift of the supply curve. On the other hand, production costs can be increased, for example, a Plantain chip producer upgrading from sealing with matches to a sealing machine. The producer must bear the cost of the machine, electrical costs and perhaps even the

cost of a special kind of bag for the machine. This will cause a shift of the supply curve to the left.

Government taxes and subsidies – increase in taxation on a business may result in its unwillingness to produce a product altogether or as much of a product as before, while tax reductions may cause an increase in supply of a product (Miller, 1999). Increase in taxation will cause a leftward shift of the supply curve while reduction of taxation will cause a rightward shift of the supply curve. Government subsidies and financial support, may be an incentive for new firms to enter the market for a product and will result in a shift of the supply curve to the right (Miller, 1999).

Producers or sellers expectations for future prices- Businesses' expectations for future market prices for a product to raise or fall will affect market supply (Miller, 1999). When sellers expect the price of a product to fall in the future, sellers tend to increase the quantity currently supplied resulting in a supply curve shift to the right. On the other hand, when firms expect the price of a product to increase in the future, they would be inclined to store their inventory for the product, reducing supply in current time. Their rationale for this is so that they will be able to increase supply when the price rises, resulting in profit maximization. The decrease in supply in current time will cause supply curve shift to the left (Mabry & Ulbrich, 1989).

Price of related goods in production – Related good are those goods that can be produced with the same factors of production (Mabry & Ulbrich, 1989). An example of related goods in production is tennis rolls and bread, which are substitutes. When a bakery learns that the production tennis rolls is more

profitable, they would use their ingredients in producing more tennis rolls. Similarly, if the market price for bread increases, firms would decrease their supply of tennis rolls, because bakeries would use their ingredients in the production of bread. This decrease in supply of tennis rolls will cause a leftward shift of the supply curve while an increase in supply of tennis rolls will cause a rightward shift of the supply curve for the product. The same principle applies for the supply of bread and how it shifts the supply curve.

A change in the price of a complement good in production will make a firm sell more or less of both products (AmosWEB LLC, 2012). This means that an increase in the price of a complement motivates sellers to sell more of this good as they sell more of the complement good, while a decrease in the price of a complement will cause a firm to sell less of a good in conjunction with its complement (AmosWEB LLC, 2012). This is the case with hot dog bread and sausages. When the price of hot dog bread increases, firms may sell more sausages. This will cause a rightward shift in the supply curve. However, as the price of hot dog bread decreases, firms may respond by selling fewer sausages. The supply curve would shift to the left in this instance.

Price Decrease in Increase in

Supply Supply

$12

4 8 14 Quantity

Graph 1

Graph 1 – A supply curve illustrating a change in supply (shift in the supply curve)

A rightward shift on the supply curve denotes an increase in supply, while a leftward shift denotes a decrease in supply

Price Supply

$12

$6

$2

2 5 8 Quantity

Graph 2

Graph 2 – A supply curve illustrating a change in quantity supplied (movement along the supply curve).

Difference between a change in supply and a change in quantity supplied

A change in supply is a change in the general supply relation in all price and quantity pairs which is consequent of a change in one of the determinants of supply and causes the supply curve to shift. A change in quantity supplied is the change in the specific amount of a good that sellers are willing and able to supply, which is consequent of a change in price and causes a movement along the supply curve (AmosWEB LLC, 2012).