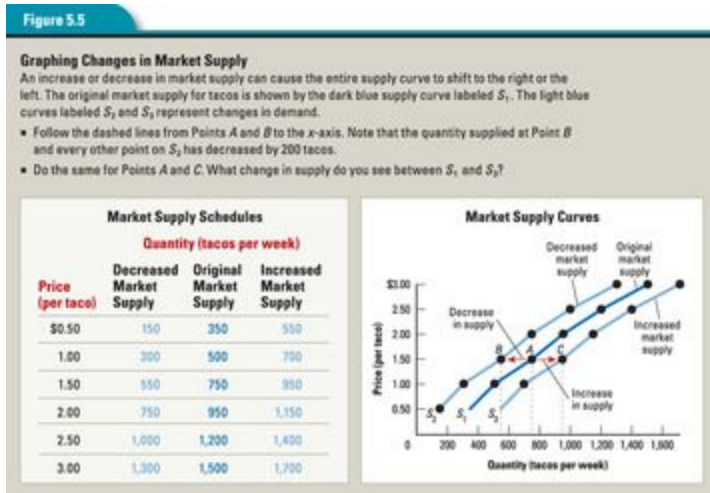


What Can Cause Supply to Change?

Lesson 5, Section 5

As the law of supply recognizes, price is important to producers when they are deciding how much of a good or service to offer for sale. But factors other than price can also influence supply. Think about what would happen if Jasmine were to close her taqueria. The market supply of tacos would decrease at all prices. Likewise, if a new taqueria were to open, the market supply of tacos would increase at all prices. What would these changes in supply look like on a graph?



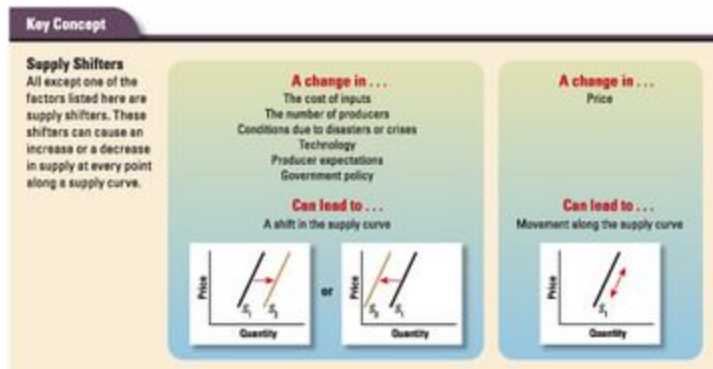
Graphing Changes in Supply: Shifting Supply Curves

When the price of a product changes, the quantity supplied moves along the supply curve. But often a variable other than price—such as a change in the number of producers—can cause market supply at all prices to increase or decrease. Economists call this a **change in supply**. A change in supply causes the entire supply curve to shift to a new position. The graph in Figure 5.5 illustrates this effect.

The schedule in Figure 5.5 contains market supply data for our imaginary taco market. The original market supply of tacos is shown in the middle column. The decrease and increase in market supply are shown in the columns to the left and right.

The three supply curves on the graph correspond to the three market supply schedules. The original market supply data were used to plot the supply curve in the middle. The supply curve on the left shows the decrease in quantity supplied at every price, and the supply curve on the right shows the increase in quantity supplied at every price.

These changes in supply caused the entire supply curve to move. When this happens—when a factor other than price causes the quantities supplied at every price to change—economists say that the supply curve has shifted. When supply increases, the supply curve shifts to the right. When supply decreases, the supply curve shifts to the left.



Supply Shifters: Factors that Cause a Change in Supply

Economists point to several factors that can cause a change in supply of a good or service. Six of these **supply shifters** are listed below.

Changes in the cost of inputs. Any change in the cost of a factor of production—land, labor, or capital—will result in a change in the market supply of a product. Profit is the key to this process. Lower production costs increase profits. Higher profits are an incentive to produce more. Thus a decrease in production costs causes an increase in supply. The supply curve shifts to the right.

In the same way, an increase in production costs causes a decrease in supply. For example, an increase in the price of coltan, a metallic ore used in the manufacture of electronic devices, would cause cell phone production costs to increase. Profits would go down. The quantity of cell phones that producers would be willing and able to supply at all prices would likely decrease. The supply curve would shift to the left.

Changes in the number of producers. Another factor that affects supply is the number of producers in a market. Producers enter a market when they think there is a profit to be made. This happened with lightweight tablet computers introduced a couple years ago. The iPad, introduced by Apple in 2010, was the first tablet to enjoy robust sales. Its success attracted many other producers into the tablet market. The market supply of tablets increased dramatically.

Changes in conditions due to natural disasters or international events. Natural disasters such as hurricanes, floods, and wildfires can decrease supply. Consider what would happen to the supply of orange juice if a sudden cold snap were to wipe out half the Florida orange crop. Supply would decrease—producers of orange juice would supply fewer cartons of juice at every price.

International crises such as wars and revolutions can have a similar effect. For example, what if a rebel group were to block the main port of a major copper-producing country? Firms producing copper wire and copper pipes would supply smaller quantities at every price.



Changes in technology. Technological advances can reduce the amount of labor needed to produce a good, thereby lowering costs and increasing productivity. A prime example of this kind of technology is the robot. Automobile manufacturers today use thousands of robots for spot welding, painting, assembly, and other tasks. This technology allows automakers to produce more vehicles with the same amount of human labor. This, in turn, lowers the cost of production, which leads to an increase in supply.

Changes in producer expectations. Producers often make supply decisions based on the expectation that prices will rise or fall. For example, what if wheat farmers were offered a low price for their crop? Farmers might take part of their crop off the market and put it into storage. Expecting higher prices in the future, wheat farmers would supply less to the market today. The supply curve for wheat would shift to the left. Expectations that future prices will fall leads to the opposite effect—producers supply more to the market in the short term, hoping to make a profit before prices decrease.

Changes in government policy. Governments can directly affect supply in two ways. One is by offering producers a **subsidy**—a cash payment aimed at helping a producer to continue to operate. The U.S. government, for example, pays large subsidies to farmers. Farm subsidies do not necessarily increase supply, however. Sometimes farmers are paid *not* to farm their land to keep supply low and prices high.

Governments also use excise taxes to reduce the supply of certain goods. An **excise tax** is a tax on the manufacture or sale of a good. It adds to the production cost of every unit produced, thereby causing supply to decrease.