SECTION 3.5 SHIFT IN THE SUPPLY CURVE

- Changes in the price of a good lead to changes in quantity supplied by suppliers, which are shown as movements along a given supply curve. Changes in supply occur for other reasons than changes in the price of the product itself. A change in any other factor that can affect supplier behavior results in a shift of the entire supply curve, including input prices, the prices of related goods, expectations, number of suppliers, technology, regulation, taxes, subsidies, and weather. An increase in supply shifts the entire supply curve to the right; a decrease in supply shifts the entire supply curve to the left.

Exhibit 1: *Supply Shifts*

- Higher input prices increase the cost of production, causing the supply of a good to shift to the left at each and every price. Lower input prices decrease the cost of production, which causes the supply of a good to shift to the right at each and every price.
- The supply of a good can be influenced by the price of related goods. Firms producing a product can sometimes use their resources to produce alternative goods. Suppose a farmer's land can be used to grow either corn or wheat. Then they are substitutes in production. If the farmer is currently growing wheat and the price of corn falls, this provides an incentive for the farmer to shift acreage out of corn and into wheat. Thus, a decrease in the price of corn will increase the supply of wheat.

- Some goods are complements in production, for example leather and beef. If the price of beef rises, cattle ranchers will, increase the quantity supplied of beef and will automatically produce more leather. Thus, when the price of beef rises, the supply curve of leather shifts to the right.

Exhibit 2: *Substitutes in Production*

Exhibit 3: *Complements in Production*

Business Connection *- A Dance of Demand and Supply.*

- If producers expect a higher price in the future, they will supply less now, preferring to wait and sell when their goods will be more valuable. If producers expect now that the price will be lower in the future, they will supply more now.
- Because the market supply curve is the horizontal summation of the individual supply curves, an increase in the number of suppliers will increase market supply. A decrease in the number of suppliers will decrease market supply.
- Technological progress can lower the cost of production and increase supply.
- Supply may also change because of changes in the legal and regulatory environment in which firms operate, such as safety and pollution regulations, minimum wages, etc. If these changes increase costs, they will decrease supply. If they decrease costs, they will increase supply.
- An increase in certain taxes will increase the cost of production, decreasing supply. Subsidies, the opposite of taxes, can lower the cost of production and shift the supply curve to the right. In addition, weather can affect the supply of certain commodities, particularly agricultural products

Debate - *Is It Ethical to Grow Corn for Fuel?*

- Weather can affect the supply of certain commodities, particularly agricultural commodities and transportation services.
- If the price of a good changes, it leads to a change in its quantity supplied, but not its supply. If one of the other factors influencing sellers' behavior changes, it leads to a change in supply.

Exhibit 4: *Changes in Supply versus Change in Quantity Supplied*

Exhibit 5: *Possible Supply Shifts*