Reading 13

What Causes Entrepreneurs To Change the Quantity of Goods and Services Offered for Sale?

How would you feel if you owned a business that employed 10 workers and your state passed a law that required you to pay each worker one dollar more per hour? You probably would not be pleased. A more important question is, What would you do if this happened? If you increased your prices, you might lose too many customers to stay in business. Would you consider laying off some of your workers? Could you produce as many products if you did? What other steps might you take to control your costs of doing business? Laws may be one **determinant of supply**—a factor that will cause more or less of a product to be offered for a sale at every price.

Events may take place that affect an entrepreneur's willingness to supply goods or services at all possible prices. Often the entrepreneur has no control over the forces that cause these events. For example, in 1973, 1979, and 1990, wars in other parts of the world resulted in a **change in costs**, an increase in the cost of crude oil in the United States. All businesses that used oil as a raw material were affected. Manufacturers of products ranging from plastic toys to truck tires faced higher costs of production. Entrepreneurs who sold these products had to pay more for the goods they stocked. They reacted to this change in several ways. Many tried to pass the increased cost on to customers by charging higher prices. Others reduced the quantity of products offered for sale without changing the price. This was a **change in supply**.

A decrease in business costs can also result in a change in supply. In the 1970s and 1980s, the use of computers to control business inventories became common. Control of inventory allowed firms to have less money tied up in keeping unneeded goods on hand and to employ fewer workers to keep track of inventories. Thus, new technology reduced costs and allowed entrepreneurs to offer more goods and services for sale without raising prices—that is, to increase supply. In these cases, the supply of the product increased.

In Reading 10, Reading 11, and Reading 12, you learned about the owner of a coffee shop who produced and sold doughnuts.

In this lesson you will learn about factors that can change the quantity of a product entrepreneurs offer for sale when there is no change in price. These factors are called determinants of supply. They include changes in the costs of obtaining or producing products to be offered for sale and changes in an entrepreneur's expectations of what is likely to happen in the future. Entrepreneurs often take actions that are intended to influence determinants of supply.

Suppose this entrepreneur bought a new machine that makes doughnuts much faster. This will lower his costs. As a result of the change in technology, he can produce more doughnuts. He might develop a new supply schedule similar to the one in Illustration 13a. Study the new supply schedule and compare it with the old one.

Price	Quantity of doughnuts supplied before purchasing new machine	Quantity of doughnuts supplied after purchasing new machine
70 cents	160 doughnuts	200 doughnuts
60 cents	140 doughnuts	180 doughnuts
50 cents	120 doughnuts	160 doughnuts
40 cents	100 doughnuts	140 doughnuts
30 cents	80 doughnuts	120 doughnuts

Illustration 13a

In general, there is an inverse, or opposite, relationship between the quantity of a product supplied at any price and the cost of running a business. This means that with no change in price when costs increase, fewer products are supplied. When costs decrease, more products are supplied.

In some situations entrepreneurs may offer more or fewer products for sale because of factors other than changes in costs. For example, they sometimes sell products at or below cost to attract customers. These pricing strategies are changes in supply that are made due to a **change in expectations** for the future. Entrepreneurs hope that total sales will grow, thereby creating gains greater than any losses suffered from selling some products at or below cost. An entrepreneur who thinks market prices for a product will soon increase might offer few goods for sale at the current price and hold back many goods until the price rises.

Changes in supply can be the result of events that are beyond the control of entrepreneurs, or they may be caused by deliberate actions of entrepreneurs. In either instance, entrepreneurs need to be aware of forces that cause changes in supply in order that they may plan for the future.

CHECK YOUR UNDERSTANDING

Consider each of the following questions. If you are not sure of an answer, review the reading to find the information you need before moving on to the next question.

- 1. What is a change in supply?
- 2. What happened in 1973, 1979, and 1990 that caused a change in supply for many products?
- 3. If there is an increase in an entrepreneur's costs, what will probably happen to his or her willingness to supply products at a particular price?
- 4. What kind of relationship generally exists between changes in cost and a firm's willingness to supply products at a particular price?
- 5. What is one reason an entrepreneur might change the supply of products offered for sale when there is no change in price or in the cost of doing business?
- 6. In 1991 the minimum wage was increased. Based on what you have read, explain how this event caused a change in supply in the fast-food industry.

SOMETHING FOR YOU TO THINK ABOUT

The bar graph in Illustration 13b, on the following page, shows the cost of a bushel of wheat for every year from 1970 through 1990. How do you believe the changes in the cost of wheat would have affected the quantity of products such as bread or flour that were offered for sale at particular prices? What opportunities do changing wheat costs offer to resourceful entrepreneurs?

PUTTING IT ALL TOGETHER

How can you apply what you have learned in this lesson in making plans for your hypothetical business? In thinking about ways to apply your learning, consider the following concepts:

- determinants of supply
- changes in cost
- changes in supply
- changes in expectation

Activity 50—Unit 3/Reading 13

JOSLIN'S DISCOVERY

Although Joslin found an out-of-town source for bags, she decided not to use that supplier. She was concerned that the bags might not have the quality she wanted and was reluctant to deal with a firm that was 500 miles away. She bought 1,000 bags from her two local suppliers (800 from the first entrepreneur and 200 from her sister's parents' organization) and charged \$10 each in her store.

About two weeks later Joslin made an important discovery. An organization called Opportunity Outreach exists in her town. This program employs handicapped people and helps them find ways to support themselves. The director told Joslin his workers could produce another 400 bags a month and would charge her \$6.50 each. Joslin inspected samples of their work and immediately placed an order. She was pleased with the quality when the bags started to arrive. With this new source of bags, Joslin was willing to offer more products for sale and made up the new supply schedule below.

Price	Number of bags Joslin was willing to supply	Number of bags Joslin is willing to supply
\$10.50	1,200	1,600
\$10.00	1,000	1,400
\$9.50	800	1,200

- 1. Explain what Joslin's change in supply has to do with changes in her costs.
- If Joslin's original supplier increased the amount charged for bags from \$6.50 to \$8.50, what would probably happen to her willingness to supply bags at the price she now charges?
- 3. Describe a different event that could lead Joslin to decrease the number of bags she offers for sale.
- Describe a different event that could cause Joslin to increase the number of bags she offers for sale at her current price.

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WHAT IF THE CHICKENS GET SICK?

Kerry has been quite successful with her fancy cake business. Her customers have been pleased, and although she isn't getting rich, she has been able to make a reasonable profit. However, last week Kerry discovered she had a problem. Local egg producers found that many of their chickens were infected with a disease and had to be destroyed. As a result, it has become very difficult for Kerry to find eggs to buy. Each of Kerry's cakes requires six eggs. Kerry has to drive to several grocery stores to find eggs. The time and gasoline used increase Kerry's costs. She decided to reduce the number of cakes she offered for sale at her current price because of the increase in her costs. The supply schedule below shows her old and new supply. Study it and answer the questions.

Supply schedule for cakes before the chickens got sick	Supply schedule for cakes after the chickens got sick
40	30
30	20
20	10
10	0
	cakes before the chickens got sick 40 30 20

1. What is meant by change in supply?

- 2. How should an increase in the cost of a resource affect the quantity of a product that is supplied at a particular price?
- 3. How should a decrease in the cost of a resource affect the quantity of a product that is supplied at a particular price?
- 4. What should happen to Kerry's supply schedule for cakes as the egg producers replace their chickens and the cost of eggs falls?
- Describe one reason that might lead Kerry to supply more cakes that has nothing to do with the cost of making the cakes.
- 6. What might Kerry have done to solve her problem other than to reduce the number of cakes she was willing to supply?

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Activity 52—Unit 3/Reading 13

LESSON 13 COMPREHENSION QUIZ

- Part I: Study the list of events below. Place an I in the answer blank in front of each event that would increase the quantity supplied at each possible price. Place a D in the answer blank in front of each event that would decrease the quantity supplied at each possible price.
- 1. There is a drought in Iowa, and the corn crop is 50 percent smaller than last year. What could happen to the supply of corn taco shells at last year's price?
- 2. A new type of electric motor is invented that costs 50 percent less to make. What would happen to the supply of electric drills at last year's price?
- 3. An entrepreneur who owns a garage charged \$14.99 to change a car's oil. Then an oil embargo increased the cost he paid for a quart of motor oil from 45 cents to 65 cents. What would happen to the price of an oil change?
- 4. Coal miners go on strike. Coal prices are expected to rise 80 percent in the next few weeks. What would happen to the supply of coal that would be offered for sale now?
- 5. A law is passed that requires employers to provide health insurance for all workers, including part-time employees. What would happen to the supply of hamburgers at fast-food restaurants if there was no change in their price?
- Part II: Answer the following in complete sentences.
 - 6. If an entrepreneur offers fewer products for sale at the same price, what has probably happened to his or her costs of doing business?
 - 7. If an entrepreneur advertises the opening of a new branch store, what has happened to the quantity of products offered for sale at the current price?
 - 8. If an entrepreneur offers more products for sale at the same price, what has probably happened to his or her costs of doing business?
 - 9. If an entrepreneur finds a new supplier who charges 20 percent less than the old supplier, what will happen to the quantity of products offered for sale at the current price?
- 10. Define the term determinant of supply.

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