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PART TWO

- 3 DEMAND, SUPPLY, AND MARKET EQUILIBRIUM
- 4 ELASTICITY
- 5 MARKET FAILURES: PUBLIC GOODS AND EXTERNALITIES

PRICE, QUANTITY, AND EFFICIENCY

3

AFTER READING THIS CHAPTER, YOU SHOULD BE ABLE TO:

- 1 **Describe demand and explain how it can change.**
- 2 **Describe supply and explain how it can change.**
- 3 **Relate how supply and demand interact to determine market equilibrium.**
- 4 **Explain how changes in supply and demand affect equilibrium prices and quantities.**
- 5 **Identify what government-set prices are and how they can cause product surpluses and shortages.**
- 6 **(Appendix) Illustrate how supply and demand analysis can provide insights on actual-economy situations.**

Demand, Supply, and Market Equilibrium

ORIGIN OF THE IDEA

O 3.1

Demand and supply

The model of supply and demand is the economics profession's greatest contribution to human understanding because it explains the operation of the markets on which we depend for nearly everything that we eat, drink, or consume. The model is so powerful and so widely used that to many people it *is* economics.

This chapter explains how the model works and how it can explain both the *quantities* that are bought and sold in markets as well as the *prices* at which they trade.

Markets

Markets bring together buyers (“demanders”) and sellers (“suppliers”). The corner gas station, an e-commerce site, the local music store, a farmer’s roadside stand—all are familiar markets. The New York Stock Exchange and the Chicago Board of Trade are markets in which buyers and sellers from all over the world communicate with one another to buy and sell bonds, stocks, and commodities. Auctioneers bring together potential buyers and sellers of art, livestock, used farm equipment, and, sometimes, real estate. In labor markets, new college graduates “sell” and employers “buy” specific labor services.

Some markets are local; others are national or international. Some are highly personal, involving face-to-face contact between demander and supplier; others are faceless, with buyer and seller never seeing or knowing each other.

To keep things simple, we will focus in this chapter on markets in which large numbers of independently acting buyers and sellers come together to buy and sell standardized products. Markets with these characteristics are the economy’s most highly competitive. They include the wheat market, the stock market, and the market for foreign currencies. All such markets involve demand, supply, price, and quantity. As you will soon see, the price is “discovered” through the interacting decisions of buyers and sellers.

Demand

Demand is a schedule or a curve that shows the various amounts of a product that consumers are willing and able to purchase at each of a series of possible prices during a specified period of time.¹ Demand shows the quantities of a product that will be purchased at various possible prices, *other things equal*. Demand can easily be shown in table form. The table in Figure 3.1 is a hypothetical **demand schedule** for a *single consumer* purchasing bushels of corn.

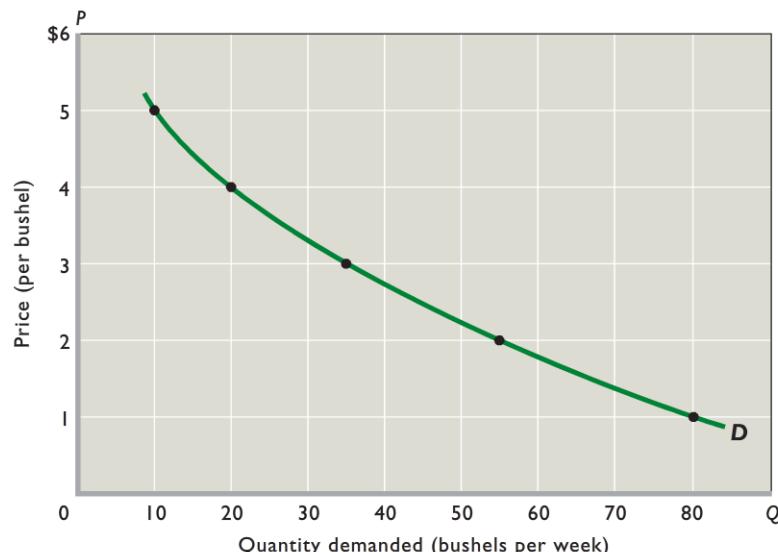
The table reveals the relationship between the various prices of corn and the quantity of corn a particular consumer would be willing and able to purchase at each of these prices. We say “willing and able” because willingness alone is not effective in the market. You may be willing to buy a plasma television set, but if that willingness is not backed by the necessary dollars, it will not be effective and, therefore, will not be reflected in the market. In the table in Figure 3.1, if the price of corn were \$5 per bushel, our consumer would be willing and able to buy 10 bushels per week; if it were \$4, the consumer would be willing and able to buy 20 bushels per week; and so forth.

The table does not tell us which of the five possible prices will actually exist in the corn market. That depends

¹This definition obviously is worded to apply to product markets. To adjust it to apply to resource markets, substitute the word “resource” for “product” and the word “businesses” for “consumers.”

FIGURE 3.1 An individual buyer’s demand for corn. Because price and quantity demanded are inversely related, an individual’s demand schedule graphs as a downslowing curve such as D . Other things equal, consumers will buy more of a product as its price declines and less of the product as its price rises. (Here and in later figures, P stands for price and Q stands for quantity demanded or supplied.)

Demand for Corn	
Price per Bushel	Quantity Demanded per Week
\$5	10
4	20
3	35
2	55
1	80



on the interaction between demand and supply. Demand is simply a statement of a buyer's plans, or intentions, with respect to the purchase of a product.

To be meaningful, the quantities demanded at each price must relate to a specific period—a day, a week, a month. Saying “A consumer will buy 10 bushels of corn at \$5 per bushel” is meaningless. Saying “A consumer will buy 10 bushels of corn *per week* at \$5 per bushel” is meaningful. Unless a specific time period is stated, we do not know whether the demand for a product is large or small.

Law of Demand

A fundamental characteristic of demand is this: Other things equal, as price falls, the quantity demanded rises,

and as price rises, the quantity demanded falls. In short, there is a negative or *inverse* relationship between price and

quantity demanded. Economists call this inverse relationship the **law of demand**.

The other-things-equal assumption is critical here. Many factors other than the price of the product being considered affect the amount purchased. For example, the quantity of Nikes purchased will depend not only on the price of Nikes but also on the prices of such substitutes as Reeboks, Adidas, and New Balances. The law of demand in this case says that fewer Nikes will be purchased if the price of Nikes rises and if the prices of Reeboks, Adidas, and New Balances all remain constant. In short, if the *relative price* of Nikes rises, fewer Nikes will be bought. However, if the price of Nikes and the prices of all other competing shoes increase by some amount—say, \$5—consumers might buy more, fewer, or the same number of Nikes.

Why the inverse relationship between price and quantity demanded? Let's look at three explanations, beginning with the simplest one:

- The law of demand is consistent with common sense. People ordinarily *do* buy more of a product at a low price than at a high price. Price is an obstacle that deters consumers from buying. The higher that obstacle, the less of a product they will buy; the lower the price obstacle, the more they will buy. The fact that businesses have “sales” to clear out unsold items is evidence of their belief in the law of demand.
- In any specific time period, each buyer of a product will derive less satisfaction (or benefit, or utility) from each successive unit of the product consumed. The second Big Mac will yield less satisfaction to the

ORIGIN OF THE IDEA

O 3.3

Diminishing marginal utility

consumer than the first, and the third still less than the second. That is, consumption is subject to **diminishing marginal utility**.

And because successive units of a particular product yield less and less marginal utility, consumers will buy additional units only if the price of those units is progressively reduced.

- We can also explain the law of demand in terms of income and substitution effects. The **income effect** indicates that a lower price increases the purchasing power of a buyer's money income, enabling the buyer to purchase more of the product than before. A higher price has the opposite effect. The **substitution effect** suggests that at a lower price buyers have the incentive to substitute what is now a less expensive product for other products that are now *relatively* more expensive. The product whose price has fallen is now “a better deal” relative to the other products.

For example, a decline in the price of chicken will increase the purchasing power of consumer incomes, enabling people to buy more chicken (the income effect). At

a lower price, chicken is relatively more attractive and consumers tend to substitute it for pork, lamb, beef, and fish (the substitution effect).

The income and substitution effects combine to make consumers able and willing to buy more of a product at a low price than at a high price.

The Demand Curve

The inverse relationship between price and quantity demanded for any product can be represented on a simple graph, in which, by convention, we measure *quantity demanded* on the horizontal axis and *price* on the vertical axis. In the graph in Figure 3.1 we have plotted the five price-quantity data points listed in the accompanying table and connected the points with a smooth curve, labeled *D*. Such a curve is called a **demand curve**. Its downward slope reflects the law of demand—people buy more of a product, service, or resource as its price falls. The relationship between price and quantity demanded is inverse (or negative).

The table and graph in Figure 3.1 contain exactly the same data and reflect the same relationship between price and quantity demanded. But the graph shows that relationship much more simply and clearly than a table or a description in words.

Market Demand

So far, we have concentrated on just one consumer. But competition requires that more than one buyer be present in each market. By adding the quantities demanded by all consumers at each of the various possible prices, we can get from *individual* demand to *market* demand. If there are just three buyers in the market, as represented in the table in Figure 3.2, it is relatively easy to determine the total quantity demanded at each price. Figure 3.2 shows the graphical summing procedure: At each price we sum horizontally the quantities demanded by Joe, Jen, and Jay to obtain the total quantity demanded at that price; we then plot the price and the total quantity demanded as one point on the market demand curve.

Competition, of course, ordinarily entails many more than three buyers of a product. To avoid hundreds or thousands or millions of additions, we suppose that all the buyers in a market are willing and able to buy the same amounts at each of the possible prices. Then we just multiply those amounts by the number of buyers to obtain the market demand. That is how we arrived at the demand schedule and demand curve D_1 in Figure 3.3 for a market of 200 corn buyers, each with a demand as shown in the table in Figure 3.1.

In constructing a demand curve such as D_1 in Figure 3.3, economists assume that price is the most

important influence on the amount of any product purchased. But economists know that other factors can and do affect purchases. These factors, called **determinants of demand**, are assumed to be constant when a demand curve like D_1 is drawn. They are the “other things equal” in the relationship between price and quantity demanded. When any of these determinants changes, the demand curve will shift to the right or left. For this reason, determinants of demand are sometimes referred to as *demand shifters*.

The basic determinants of demand are (1) consumers' tastes (preferences), (2) the number of buyers in the market, (3) consumers' incomes, (4) the prices of related goods, and (5) consumer expectations.

Changes in Demand

A change in one or more of the determinants of demand will change the demand data (the demand schedule) in the table accompanying Figure 3.3 and therefore the location of the demand curve there. A change in the demand schedule or, graphically, a shift in the demand curve is called a *change in demand*.

If consumers desire to buy more corn at each possible price than is reflected in column 2 in the table in Figure 3.3, that *increase in demand* is shown as a shift of the demand curve to the right, say, from D_1 to D_2 . Conversely, a *decrease in demand* occurs when consumers buy less corn

FIGURE 3.2 Market demand for corn, three buyers. The market demand curve D is the horizontal summation of the individual demand curves (D_1 , D_2 , and D_3) of all the consumers in the market. At the price of \$3, for example, the three individual curves yield a total quantity demanded of 100 bushels ($= 35 + 39 + 26$).

Price per Bushel	Quantity Demanded			Total Quantity Demanded per Week			
	Joe	Jen	Jay				
\$5	10	+	12	+	8	=	30
4	20	+	23	+	17	=	60
3	35	+	39	+	26	=	100
2	55	+	60	+	39	=	154
1	80	+	87	+	54	=	221

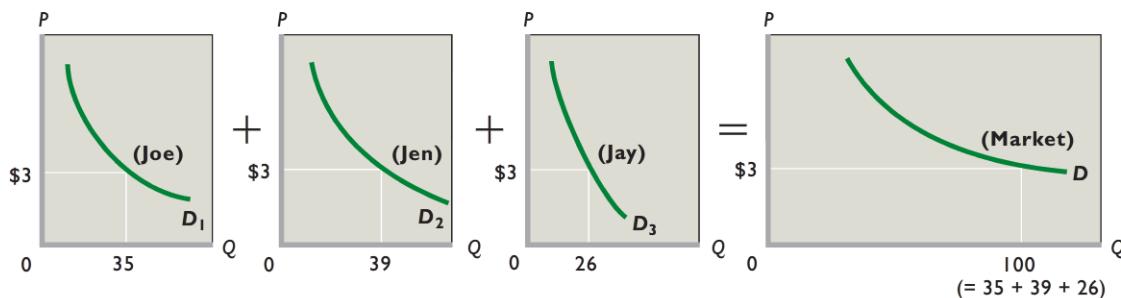
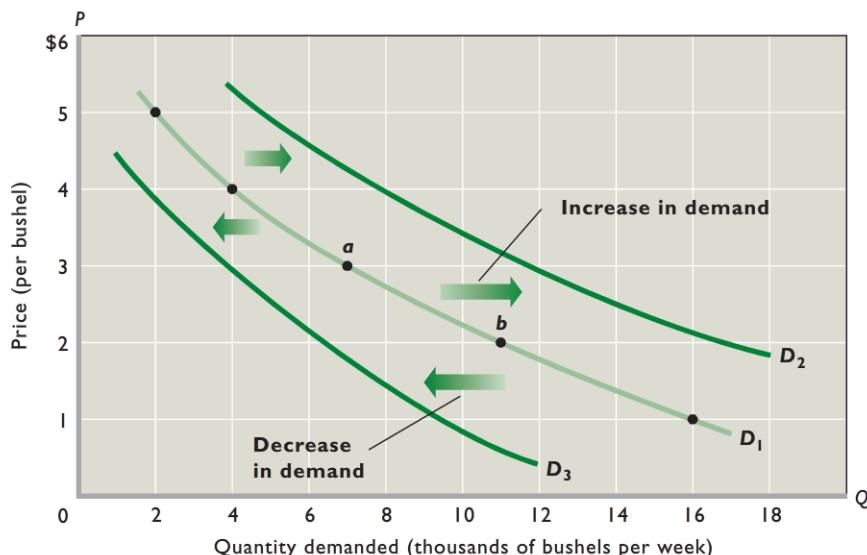


FIGURE 3.3 Changes in the demand for corn. A change in one or more of the determinants of demand causes a change in demand. An increase in demand is shown as a shift of the demand curve to the right, as from D_1 to D_2 . A decrease in demand is shown as a shift of the demand curve to the left, as from D_1 to D_3 . These changes in demand are to be distinguished from a change in quantity demanded, which is caused by a change in the price of the product, as shown by a movement from, say, point *a* to point *b* on fixed demand curve D_1 .



Market Demand for Corn, 200 Buyers, (D_1)	
(1)	(2)
Price per Bushel	Total Quantity Demanded per Week
\$5	2000
4	4000
3	7000
2	11,000
1	16,000

at each possible price than is indicated in column 2. The leftward shift of the demand curve from D_1 to D_3 in Figure 3.3 shows that situation.

Now let's see how changes in each determinant affect demand.

Tastes A favorable change in consumer tastes (preferences) for a product—a change that makes the product more desirable—means that more of it will be demanded at each price. Demand will increase; the demand curve will shift rightward. An unfavorable change in consumer preferences will decrease demand, shifting the demand curve to the left.

New products may affect consumer tastes; for example, the introduction of digital cameras greatly decreased the demand for film cameras. Consumers' concern over the health hazards of cholesterol and obesity have increased the demand for broccoli, low-calorie beverages, and fresh fruit while decreasing the demand for beef, veal, eggs, and whole milk. Over the past several years, the demand for coffee drinks and table wine has greatly increased, driven by a change in tastes. So, too, has the demand for touch-screen mobile phones and fuel-efficient hybrid vehicles.

Number of Buyers An increase in the number of buyers in a market is likely to increase demand; a decrease in the number of buyers will probably decrease demand. For example, the rising number of older persons in the United

States in recent years has increased the demand for motor homes, medical care, and retirement communities. Large-scale immigration from Mexico has greatly increased the demand for a range of goods and services in the Southwest, including Mexican food products in local grocery stores. Improvements in communications have given financial markets international range and have thus increased the demand for stocks and bonds. International trade agreements have reduced foreign trade barriers to American farm commodities, increasing the number of buyers and therefore the demand for those products.

In contrast, emigration (out-migration) from many small rural communities has reduced the population and thus the demand for housing, home appliances, and auto repair in those towns.

Income How changes in income affect demand is a more complex matter. For most products, a rise in income causes an increase in demand. Consumers typically buy more steaks, furniture, and electronic equipment as their incomes increase. Conversely, the demand for such products declines as their incomes fall. Products whose demand varies directly with money income are called *superior goods*, or *normal goods*.

Although most products are normal goods, there are some exceptions. As incomes increase beyond some point, the demand for used clothing, retread tires, and third-hand automobiles may decrease, because the higher incomes

enable consumers to buy new versions of those products. Rising incomes may also decrease the demand for soy-enhanced hamburger. Similarly, rising incomes may cause the demand for charcoal grills to decline as wealthier consumers switch to gas grills. Goods whose demand varies *inversely* with money income are called **inferior goods**.

Prices of Related Goods A change in the price of a related good may either increase or decrease the demand for a product, depending on whether the related good is a substitute or a complement:

- A **substitute good** is one that can be used in place of another good.
- A **complementary good** is one that is used together with another good.

Substitutes Häagen-Dazs ice cream and Ben & Jerry's ice cream are substitute goods or, simply, *substitutes*. When two products are substitutes, an increase in the price of one will increase the demand for the other. Conversely, a decrease in the price of one will decrease the demand for the other. For example, when the price of Häagen-Dazs ice cream rises, consumers will buy less of it and increase their demand for Ben & Jerry's ice cream. When the price of Colgate toothpaste declines, the demand for Crest decreases. So it is with other product pairs such as Nikes and Reeboks, Budweiser and Miller beer, or Chevrolets and Fords. They are *substitutes in consumption*.

Complements Because complementary goods (or, simply, *complements*) are used together, they are typically demanded jointly. Examples include computers and software, cell phones and cellular service, and snowboards and lift tickets. If the price of a complement (for example, lettuce) goes up, the demand for the related good (salad dressing) will decline. Conversely, if the price of a complement (for example, tuition) falls, the demand for a related good (textbooks) will increase.

Unrelated Goods The vast majority of goods are not related to one another and are called *independent goods*. Examples are butter and golf balls, potatoes and automobiles, and bananas and wristwatches. A change in the price of one has little or no effect on the demand for the other.

Consumer Expectations Changes in consumer expectations may shift demand. A newly formed expectation of higher future prices may cause consumers to buy now in order to "beat" the anticipated price rises, thus increasing current demand. That is often what happens in so-called hot real estate markets. Buyers rush in because

they think the price of new homes will continue to escalate rapidly. Some buyers fear being "priced out of the market" and therefore not obtaining the home they desire. Other buyers—speculators—believe they will be able to sell the houses later at a higher price. Whichever their motivation, these buyers increase the current demand for houses.

Similarly, a change in expectations concerning future income may prompt consumers to change their current spending. For example, first-round NFL draft choices may splurge on new luxury cars in anticipation of lucrative professional football contracts. Or workers who become fearful of losing their jobs may reduce their demand for, say, vacation travel.

In summary, an *increase* in demand—the decision by consumers to buy larger quantities of a product at each possible price—may be caused by:

- A favorable change in consumer tastes.
- An increase in the number of buyers.
- Rising incomes if the product is a normal good.
- Falling incomes if the product is an inferior good.
- An increase in the price of a substitute good.
- A decrease in the price of a complementary good.
- A new consumer expectation that either prices or income will be higher in the future.

You should "reverse" these generalizations to explain a *decrease* in demand. Table 3.1 provides additional illustrations of the determinants of demand.

TABLE 3.1 Determinants of Demand: Factors That Shift the Demand Curve

Determinant	Examples
Change in buyer tastes	Physical fitness rises in popularity, increasing the demand for jogging shoes and bicycles; cell phone popularity rises, reducing the demand for landline phones.
Change in number of buyers	A decline in the birthrate reduces the demand for children's toys.
Change in income	A rise in incomes increases the demand for normal goods such as restaurant meals, sports tickets, and necklaces while reducing the demand for inferior goods such as cabbage, turnips, and inexpensive wine.
Change in the prices of related goods	A reduction in airfares reduces the demand for bus transportation (substitute goods); a decline in the price of DVD players increases the demand for DVD movies (complementary goods).
Change in consumer expectations	Inclement weather in South America creates an expectation of higher future coffee bean prices, thereby increasing today's demand for coffee beans.

Changes in Quantity Demanded

A *change in demand* must not be confused with a *change in quantity demanded*. A **change in demand** is a shift of the demand curve to the right (an increase in demand) or to the left (a decrease in demand). It occurs because the consumer's state of mind about purchasing the product has been altered in response to a change in one or more of the determinants of demand. Recall that "demand" is a schedule or a curve; therefore, a "change in demand" means a change in the schedule and a shift of the curve.

In contrast, a **change in quantity demanded** is a movement from one point to another point—from one price-quantity combination to another—on a fixed demand curve. The cause of such a change is an increase or decrease in the price of the product under consideration. In the table in Figure 3.3, for example, a decline in the price of corn from \$5 to \$4 will increase the quantity demanded of corn from 2000 to 4000 bushels.

In Figure 3.3 the shift of the demand curve D_1 to either D_2 or D_3 is a change in demand. But the movement from point a to point b on curve D_1 represents a change in quantity demanded: Demand has not changed; it is the entire curve, and it remains fixed in place.

QUICK REVIEW 3.1

- Demand is a schedule or a curve showing the amount of a product that buyers are willing and able to purchase, in a particular time period, at each possible price in a series of prices.
- The law of demand states that, other things equal, the quantity of a good purchased varies inversely with its price.
- The demand curve shifts because of changes in (a) consumer tastes, (b) the number of buyers in the market, (c) consumer income, (d) the prices of substitute or complementary goods, and (e) consumer expectations.
- A change in demand is a shift of the demand curve; a change in quantity demanded is a movement from one point to another on a fixed demand curve.

Supply

Supply is a schedule or curve showing the various amounts of a product that producers are willing and able to make available for sale at each of a series of possible prices during a specific period.² The table in Figure 3.4 is a hypothetical

²This definition is worded to apply to product markets. To adjust it to apply to resource markets, substitute "resource" for "product" and "owners" for "producers."

supply schedule for a single producer of corn. It shows the quantities of corn that will be supplied at various prices, other things equal.

Law of Supply

The table in Figure 3.4 shows that a positive or direct relationship prevails between price and quantity supplied. As price rises, the quantity supplied rises; as price falls, the quantity supplied falls. This relationship is called the **law of supply**. A supply schedule tells us that, other things equal, firms will produce and offer for sale more of their product at a high price than at a low price. This, again, is basically common sense.

Price is an obstacle from the standpoint of the consumer, who is on the paying end. The higher the price, the less the consumer will buy. But the supplier is on the receiving end of the product's price. To a supplier, price represents *revenue*, which serves as an incentive to produce and sell a product. The higher the price, the greater this incentive and the greater the quantity supplied.

Consider a farmer who is deciding on how much corn to plant. As corn prices rise, as shown in the table in Figure 3.4, the farmer finds it profitable to plant more corn. And the higher corn prices enable the farmer to cover the increased costs associated with more intensive cultivation and the use of more seed, fertilizer, and pesticides. The overall result is more corn.

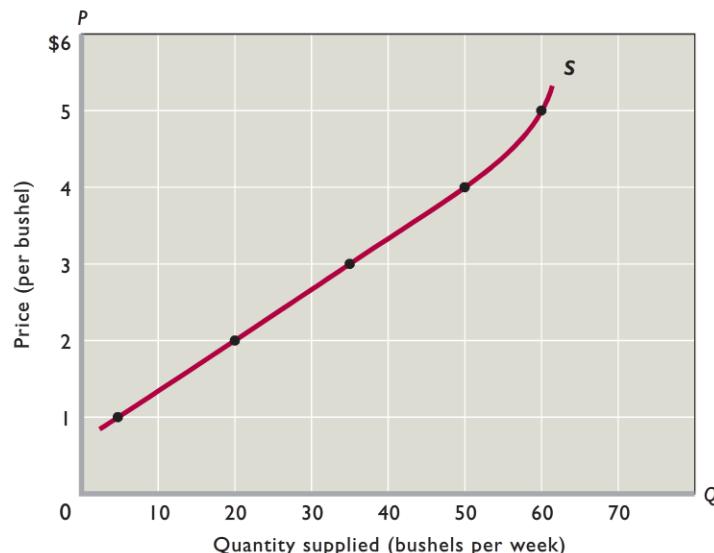
Now consider a manufacturer. Beyond some quantity of production, manufacturers usually encounter increases in *marginal cost*—the added cost of producing one more unit of output. Certain productive resources—in particular, the firm's plant and machinery—cannot be expanded quickly, so the firm uses more of other resources such as labor to produce more output. But as labor becomes more abundant relative to the fixed plant and equipment, the additional workers have relatively less space and access to equipment. For example, the added workers may have to wait to gain access to machines. As a result, each added worker produces less added output, and the marginal cost of successive units of output rises accordingly. The firm will not produce the more costly units unless it receives a higher price for them. Again, price and quantity supplied are directly related.

The Supply Curve

As with demand, it is convenient to represent individual supply graphically. In Figure 3.4, curve S is the **supply curve** that corresponds with the price-quantity supplied data in the accompanying table. The upward slope of the curve reflects the law of supply—producers offer more of

FIGURE 3.4 An individual producer's supply of corn. Because price and quantity supplied are directly related, the supply curve for an individual producer graphs as an upsloping curve. Other things equal, producers will offer more of a product for sale as its price rises and less of the product for sale as its price falls.

Supply of Corn	
Price per Bushel	Quantity Supplied per Week
\$5	60
4	50
3	35
2	20
1	5



a good, service, or resource for sale as its price rises. The relationship between price and quantity supplied is positive, or direct.

Market Supply

Market supply is derived from individual supply in exactly the same way that market demand is derived from individual demand. We sum the quantities supplied by each producer at each price. That is, we obtain the market supply curve by “horizontally adding” the supply curves of the individual producers. The price–quantity supplied data in the table accompanying Figure 3.5 are for an assumed 200 identical producers in the market, each willing to supply corn according to the supply schedule shown in Figure 3.4. Curve S_1 in Figure 3.5 is a graph of the market supply data. Note that the values of the axes in Figure 3.5 are the same as those used in our graph of market demand (Figure 3.3). The only difference is that we change the label on the horizontal axis from “quantity demanded” to “quantity supplied.”

Determinants of Supply

In constructing a supply curve, we assume that price is the most significant influence on the quantity supplied of any product. But other factors (the “other things equal”) can and do affect supply. The supply curve is drawn on the assumption that these other things are fixed and do not change. If one of them does change, a *change in supply* will occur, meaning that the entire supply curve will shift.

The basic **determinants of supply** are (1) resource prices, (2) technology, (3) taxes and subsidies, (4) prices of other goods, (5) producer expectations, and (6) the number of sellers in the market. A change in any one or more of these determinants of supply, or *supply shifters*, will move the supply curve for a product either right or left. A shift to the *right*, as from S_1 to S_2 in Figure 3.5, signifies an *increase* in supply: Producers supply larger quantities of the product at each possible price. A shift to the *left*, as from S_1 to S_3 , indicates a *decrease* in supply: Producers offer less output at each price.

Changes in Supply

Let's consider how changes in each of the determinants affect supply. The key idea is that costs are a major factor underlying supply curves; anything that affects costs (other than changes in output itself) usually shifts the supply curve.

Resource Prices The prices of the resources used in the production process help determine the costs of production incurred by firms. Higher *resource* prices raise production costs and, assuming a particular *product* price, squeeze profits. That reduction in profits reduces the incentive for firms to supply output at each product price. For example, an increase in the price of sand, crushed rock, or Portland cement will increase the cost of producing concrete and reduce its supply.

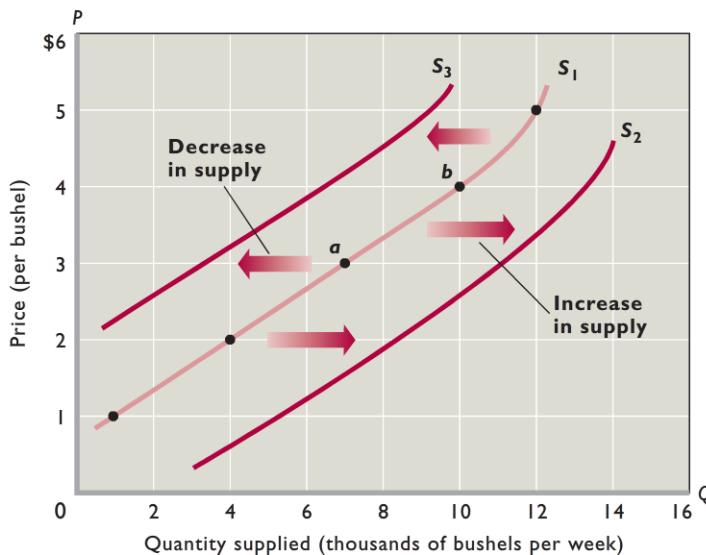


FIGURE 3.5 Changes in the supply of corn. A change in one or more of the determinants of supply causes a change in supply. An increase in supply is shown as a rightward shift of the supply curve, as from S_1 to S_2 . A decrease in supply is depicted as a leftward shift of the curve, as from S_1 to S_3 . In contrast, a change in the *quantity supplied* is caused by a change in the product's price and is shown by a movement from one point to another, as from *b* to *a* on fixed supply curve S_1 .

Market Supply of Corn, 200 Producers, (S_1)	
(1)	(2)
Price per Bushel	Total Quantity Supplied per Week
\$5	12,000
4	10,000
3	7000
2	4000
1	1000

In contrast, lower *resource* prices reduce production costs and increase profits. So when resource prices fall, firms supply greater output at each product price. For example, a decrease in the price of iron ore will decrease the price of steel.

Technology Improvements in technology (techniques of production) enable firms to produce units of output with fewer resources. Because resources are costly, using fewer of them lowers production costs and increases supply. Example: Technological advances in producing flat-panel computer monitors have greatly reduced their cost. Thus, manufacturers will now offer more such monitors than previously at the various prices; the supply of flat-panel monitors has increased.

Taxes and Subsidies Businesses treat most taxes as costs. An increase in sales or property taxes will increase production costs and reduce supply. In contrast, subsidies are “taxes in reverse.” If the government subsidizes the production of a good, it in effect lowers the producers’ costs and increases supply.

Prices of Other Goods Firms that produce a particular product, say, soccer balls, can sometimes use their plant and equipment to produce alternative goods, say, basketballs and volleyballs. The higher prices of these “other goods” may entice soccer ball producers to switch production to those other goods in order to increase profits. This *substitution in production* results in a

decline in the supply of soccer balls. Alternatively, when the prices of basketballs and volleyballs decline relative to the price of soccer balls, producers of those goods may decide to produce more soccer balls instead, increasing their supply.

Producer Expectations Changes in expectations about the future price of a product may affect the producer’s current willingness to supply that product. It is difficult, however, to generalize about how a new expectation of higher prices affects the present supply of a product. Farmers anticipating a higher wheat price in the future might withhold some of their current wheat harvest from the market, thereby causing a decrease in the current supply of wheat. In contrast, in many types of manufacturing industries, newly formed expectations that price will increase may induce firms to add another shift of workers or to expand their production facilities, causing current supply to increase.

Number of Sellers Other things equal, the larger the number of suppliers, the greater the market supply. As more firms enter an industry, the supply curve shifts to the right. Conversely, the smaller the number of firms in the industry, the less the market supply. This means that as firms leave an industry, the supply curve shifts to the left. Example: The United States and Canada have imposed restrictions on haddock fishing to replenish dwindling stocks. As part of that policy, the Federal government has bought the boats of some of the haddock fishers as a way of putting