02 DEMAND AND SUPPLY: THE BASICS OF THE MARKET ECONOMY

LEARNING OBJECTIVES

- **LO2-1** Identify the key elements of a market.
- **LO2-2** Explain how the price in a market affects the quantity demanded.
- **LO2-3** Explain how the price in a market affects the quantity supplied.
- **LO2-4** Discuss why the number of markets can increase.

Remember Legos, those little plastic building blocks? In April 2009 the world's then-tallest Lego tower was built in Nasu, Japan. Constructed from more than 400,000 Lego bricks, the tower stretched an impressive 97 feet high.

A **market economy,** such as that of the United States or Japan, is a bit like a Lego tower. It's an economic system made up of smaller "building blocks" of individual markets for trading all the different goods and services used in a country.

The variety of different markets is almost too big to grasp. It ranges from the market for homes in Chicago, to the online market for video games, to the market for airline tickets between London and Shanghai, to the market for pizza in Missoula, Montana (which in early 2011 included 29 pizza stores, according to the Yahoo! yellow pages).

This chapter introduces the basics of the market economy. First we'll explore the differences among local, national, and global markets. Next we'll look separately at demand and supply in markets–that is, the behavior of buyers and sellers. Then we'll briefly discuss the creation of new markets.

PRICES, BUYERS, AND SELLERS

Any market has one or more **buyers** and one or more **sellers.** In the market the **buyer** pays money in exchange for a **product**—a good or service. The **sellers** receive money in exchange for supplying the product. The rate at which the buyer and seller exchange money for the good or service is known as the **price.**

PRICE
The rate at which the buyer and seller exchange money for a good or service.

A simple example is the market for apples, say, in your town. There may be several sellers—the local supermarkets, the organic food store, and the corner deli. There are generally many buyers, such as people who enjoy eating apples and restaurants that make apple pie. The price is the amount a buyer pays per pound of apples (in 2010 the average price of a pound of Red Delicious apples was $1.22).

It's usually easy to figure out who are the buyers and sellers in a market. The individuals or businesses with the cash, or credit cards in their hands, or writing the checks, are the buyers. The people or businesses collecting the money are the sellers.

But keep in mind that each individual or business is typically a buyer in some markets and a seller in others. For example, the typical worker is a seller in the **labor market.** That is, workers sell their time on the job for money. Meanwhile, they are buyers in most other areas of their lives, purchasing food, coffee, video games, and other necessities and luxuries. A business such as Starbucks is a seller in the market for premium cups of coffee—but it's also a buyer of coffee beans, coffee cups, espresso machines, office computers, and the labor of its workers.

Local, National, and Global Markets

Buyers and sellers who are geographically close to each other are part of a **local market.** For example, certain perishable food products like milk are generally sold in local markets (see "Spotlight: The Milk Market" on page •••). Dental services are typically local because you are unlikely to travel to a different part of the country to have your teeth cleaned. Similarly, many personal services such as haircuts, dry cleaning, and shoe repairs are handled in local markets. Even in today's global economy, no one is going to ship their dresses or shirts to China to be dry-cleaned!

In contrast, a **national market** lets buyers and sellers conduct transactions across the country. Thanks to the Internet and fast transportation, an increasing number of goods and services are traded in national markets. Do you want to open a stock account? No matter where in the United States you live, you can buy those stock-trading services from a broker anywhere else in the country. You can go house-hunting on the Internet and buy books, clothes, electronics, and music online. You can hire professionals in other parts of the country to improve your résumé or do your taxes.

Similarly, **global markets** allow buyers and sellers to be anywhere in the world. Crude oil has been sold on global markets for decades, as have steel, fish, natural gas, and memory chips. Global markets are often the province of globe-spanning companies called **multinationals,** which have operations in multiple countries. The

SPOTLIGHT: THE MILK MARKET

When you drink a glass of milk, there is a good chance it hasn't traveled more than a few hundred miles from the cow. Virtually every state has its own dairy industry, with distinctively named brands of milk from Shamrock Farms in Arizona to Golden Fleece Dairy in Florida. As a result, the market for fluid milk is mainly local.

In theory, refrigerated milk could be safely shipped much farther than current distribution patterns. But a complicated set of government regulations—in place since the 1930s—discourages but does not prohibit long-distance shipments of fluid milk.

In contrast, the market for dairy products such as cheese and butter is clearly global. The butter you put on a piece of bread may have come from as far away as New Zealand, and the cheese you eat may have come from France or even from Bulgaria, Lithuania, and Poland.

giant oil company ExxonMobil, for example, does energy exploration and production in 39 countries and sells oil, natural gas, gasoline, and lubricants almost everywhere around the globe.

One of the most remarkable changes in recent years is the seemingly overnight transformation of some local markets into vibrant national or global markets. The creation of the online auction site eBay in 1995 in the living room of founder Pierre Omidyar enabled the traditional yard sale to reach a national audience. Rather than simply advertising in a local paper, individuals can now sell their antique lamps or comic book collections to buyers around the country. And to an increasing degree, services that used to be done locally in the United States can now be outsourced to other countries. Preparing tax returns, for example, used to be the classic local service: You brought your box of receipts to your local accountant, who put your tax return together. Now the information can be transmitted to India, where the return is prepared at a much lower cost and transmitted back to the United States.

The Market Price

In economics we balance the wonderful complexity of the real world with the useful simplicity and clarity of economic models. In the previous section, for example, we talked about the *price* of a good or service as if there were only one price. In the real world, however, even identical cars may sell at different prices depending on which dealerships they are bought from and how well the buyers negotiate.

That's why we define the **market price** as the *typical* price at which a good or service sells in a market. In many cases the price for a good or service may be obvious and easy to identify. For example, the covers of most newspapers and magazines list their newsstand prices.

But sometimes identifying the price of a good or service is not as easy as reading it off a printed list. Sellers are always adjusting their prices to pull in more customers. A **sale price,** for example, is intentionally set below the market price to stimulate purchases.

Then there are **negotiated prices,** which are determined by individual buyer and seller on a case-by-case basis. Go to an auto dealer's showroom, and you will see the sticker price of a car or SUV listed on its window. But that sticker price is just the starting point for negotiation, after which different buyers may pay hundreds of dollars more or less for the same model car. Negotiated prices are more common in markets for big-ticket items like cars or homes.

MARKET PRICE
The typical price at which a good or service sells.

In some markets, buyers may be offered a **volume discount,** or a lower price for making a large purchase. For example, a hospital may charge an individual patient one price for an operation such as an appendectomy. But insurance companies may be able to negotiate a much lower price for the identical procedure, based on the large volume of operations they pay for on behalf of their customers—firms and individuals who buy medical insurance.

In other markets, an **advance purchase discount** means that prices differ according to when purchases are made (see "Economic Milestone," below). In air travel, two identical seats on the same plane may sell for different prices depending on how far ahead of time the travelers purchased them.

HOW PRICE AFFECTS THE QUANTITY DEMANDED

Some words in economics have meanings different from ordinary usage. Usually a *demand* refers to a forceful request, with the threat of consequences if the request is not met. Bank robbers demand money; babies demand their bottles.

Demand in a market, though, is a gentler concept. The **quantity demanded** by a particular buyer is the amount that a buyer is willing to purchase at a given price. For example, the weekly quantity demanded for gasoline at $3.00 per gallon is the amount a consumer is willing to buy at that price over a week.

QUANTITY DEMANDED
The amount a buyer is willing to purchase at a given price.

To really understand a market, though, it's not enough to know what consumers are buying today. We also need to know what would happen to demand if the price of a good or service went up or down. In the market for gasoline, for example, it's extremely important for government agencies and oil companies to know how much the demand for gasoline will drop if the price rises from $3.00 a gallon to $4.00 a gallon or even more.

The link between a buyer's quantity demanded and the price is called the **demand schedule.** For example, consider how many songs a person—call him Sam—might download from an online music site in a month. If the price is $0.50 per song, Sam might download 20 songs and try out some unusual ones. If the price is $2.00 per song, Sam might download only the three songs he really likes. At $4.00 a song, Sam might decide not to download any songs.

Table 2.1 shows what Sam's demand schedule might look like. The first column is the price per song, and the second column is the number of songs Sam would be willing to buy at that price.

In theory we can build a demand schedule for every possible good or service that someone could buy. For example, your demand schedule for basketball tickets would reveal how many basketball games you might attend over the next year, depending on the price. Even if you are a vegetarian, we could construct your demand schedule for hamburgers. It would show zero quantity demanded at every price because no matter how low the price of hamburgers, you wouldn't buy any.

The **market demand schedule** sums the demand schedules for all the individual buyers in a market. So the market demand schedule in a town for hamburgers, for example, tells us how many hamburgers will be bought by the people in that town at any given price. That includes vegetarians who never buy hamburgers and people who eat a cheeseburger every day for lunch.

Economic Milestone

1986 THE FIRST PREPAID TUITION PLAN

In 1986 Michigan enacted the nation's first prepaid tuition plan. The plan enabled the parents of young children to pay for future tuition costs at state public higher education institutions at the current prices, thus avoiding all future tuition increases. About 13 or so states now have similar plans–an example of an advance purchase discount.

TABLE 2.1 **Sam's Demand Schedule for Music Downloads**

The demand schedule tells us how many songs Sam will want to download, given the price per song.

Price per Song (Dollars)	Quantity Demanded (Number of Songs to be Downloaded in a Month)
$0.50	20
$1.00	10
$2.00	3
$3.00	1
$4.00	0

One final note: When we think about a demand schedule for a market, we are implicitly assuming that everything else about the buying situation stays the same when the price changes. For example, the market demand schedule for basketball tickets assumes that key factors like the quality of the team, the cost of the concessions, and the ease of traveling to the arena don't change when the price goes up or down. This assumption is called ***ceteris paribus***—Latin for "all other things equal." Economists often use this simplifying strategy to determine the effect of a single change on a complex system.

LAW OF DEMAND
A lower price tends to increase the quantity demanded, all other things equal.

The Law of Demand

When a local supermarket wants to bring in more shoppers, it advertises a sale—lower prices for detergent, say, or for lamb chops. And when Ford wants to attract more buyers for its cars or SUVs, it lowers its prices or offers rebates. The sellers expect that a lower price will increase the quantity demanded.

Alternatively, as the price of a good or service goes up, some people will simply stop buying the item, especially if it is a luxury and not a necessity. For example, if the price of a basketball ticket goes up enough, some people will simply cut basketball games out of their budgets and stop going.

Generally speaking, the lower the price, the greater the quantity demanded. This relationship between price and quantity demanded is known as the **law of demand.** Here's a good way to think about it: If the price of a good goes up, you look at your spending and ask yourself, "Is this the best use of my money?" If it's not, you spend a little bit less on the item that has gone up in price, and a little bit more on something else.

Suppose you drink three cups of coffee a day at $1 a cup. The local coffee vendor raises the price of a cup of coffee to $1.50 a cup. Now you have to ask yourself whether that third cup of coffee is still worth it, or whether you want to spend that $1.50 on a pack of gum or a piece of fruit. The principle works on a bigger scale as well. If tuition per class goes up, you may cut back on the number of college courses you take at a time.

Keep in mind that the law of demand is a general tendency, not an ironclad rule. In some cases, rising prices will *increase* demand. For example, when the prices of homes in a city are rising rapidly, buyers sometimes feel that they have to jump in quickly before the prices go even higher. Conversely, when the prices of homes start to fall in a market, buyers sometimes hold back from purchases hoping that home prices will decline further. However, despite such exceptions, you can usually expect that demand will fall as prices rise, and vice versa.

The Special Case of Zero Price

Economists will be the first people to tell you that there's no such thing as a free lunch. And in fact almost everything in life seems to come with a price tag attached. But there actually *are* a few products that come with a **zero price,** so that you can get an additional unit of a good or service at no extra charge.

HOW IT WORKS: THE iPHONE AND THE LAW OF DEMAND

Not even Steve Jobs, the billionaire head of Apple, can break the law of demand. When Apple first released its iPhone in June 2007, it got great reviews, but it sold for a stunning $599—a bit steep for most people. Two months later Apple reduced the price to $399. The result? Demand jumped. At the higher price, Apple sold just under a million iPhones, or about 14,000 per day. But after the price cut, average sales over the next four months were 20,000–25,000 per day. The price cut may not have been the only reason for the increase in sales, but it certainly helped.

When Jobs announced the price cut, many people who had rushed to buy iPhones at the earlier higher price felt cheated. As a result, Jobs was forced to write a letter on Apple's website apologizing and offering a $100 credit to those who had bought the phone at the higher price

Source: www.apple.com/hotnews/openiphoneletter.

There is no trick. In today's technology-based economy, we consume plenty of goods and services in unlimited quantities without paying anything beyond an initial fee. For example, most cable television plans allow you to watch as many shows as you want without paying extra, and many cell phone plans offer unlimited calling to other cell phones on the same network. Similarly, at least for now most broadband Internet plans allow you to connect for as long as you want for a fixed monthly charge.

Zero prices sometimes occur outside the technology sector as well. Some restaurants offer unlimited refills on coffee, and all-you-can-eat buffets are not uncommon. So if the price is zero, why don't you consume an infinite amount?

First, you generally reach **satiation** at some point, meaning that eventually the value to you of consuming any more of the good disappears. You can drink only so much free coffee at one sitting before you get full or you start to shake from too much caffeine.

There's another consideration as well. Many products and services require some time to consume. For example, if you are sitting in front of the television, you are not doing something else like taking a walk, going to the mall, or spending time with friends. And no matter how adept you are at multitasking, you cannot talk on the cell phone while you are sleeping.

In other words, even at a zero price there's an *opportunity cost* to consuming more of a good or service if it requires some of your time. In doing one thing, you are giving up the opportunity to do something else. In a world in which there are only 24 hours to the day, that's a real cost. So the

opportunity cost of watching television is not zero; it's the value to you of the other activities you could be doing instead. Your long-distance calls on your cell phone may be free, but if you spend all your time on the phone, you are not studying for exams, earning money at work, or taking a walk in the park. Such trade-offs will limit how much you consume, even at a zero price.

Opportunity cost is an important concept in economics. In general, the **opportunity cost** of a choice or action is defined as the value or benefit of the next best alternative. This embodies the basic principle that individuals have to choose between different uses of their time and money. We'll meet this idea again.

Graphing the Demand Curve

Now let's look at the demand schedule for coffee consumption in a week for an individual—call her Sally. For many people, drinking a cup of coffee is an essential part of their day. However, one principle of economics is that even the demand for necessities responds to price.

In Table 2.2, the first column is the price per cup, and the second column is the number of cups demanded during the week. For example, if the price is $1.00 per cup, Sally may consume 18 cups per week. But if she must pay $5 a cup, she will restrict herself to only six cups a week.

This demand schedule for coffee can be represented visually on a graph (shown as Figure 2.1).

HOW IT WORKS: UNCOVERING THE DEMAND SCHEDULE

Suppose you were running a record company. You want to sell music online, but how much should you charge for each song? $0.99? $0.75? $1.50?

Obviously the answer to this question depends on how many songs will be purchased at each price—the market demand schedule. For example, if the quantity demanded drops little when the price goes from $0.99 to $1.50, then it makes sense to charge the higher price.

But knowing the demand schedule for a market is often not easy, especially with a new product. One way to uncover a demand schedule is to survey consumers and ask them how much they would pay for a new product. Companies regularly show new products to groups of selected people and ask their opinions. The problem, though, is that consumers may say they highly value a product and then spend their money on something else.

For established products, one way to see a demand schedule is to actually look at how much consumers buy at various prices. This is most useful for widely used products, like gasoline, where economists can review how buyers have reacted to past price increases in order to predict the response to future price increases or decreases.

TABLE 2.2 Sally's Demand Schedule for Coffee

This demand schedule represents how many cups of coffee Sally will want to buy in a week, depending on the price.

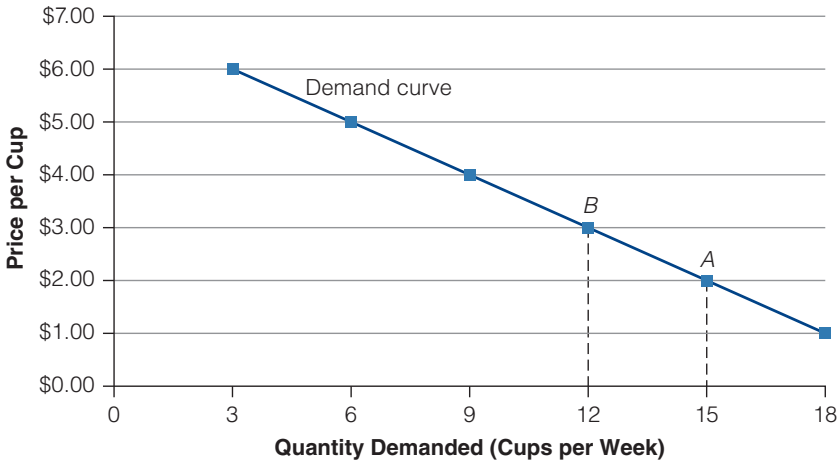
Price per Cup (Dollars)	Quantity Demanded (Cups per Week)
$1.00	18
$2.00	15
$3.00	12
$4.00	9
$5.00	6
$6.00	3

Going up the vertical axis of the graph are the different prices Sally could pay. Going across the horizontal axis of the graph are the different quantities she could demand. To plot the demand schedule on the graph, we start from a price on the vertical axis and move right until we get to the corresponding quantity.

For example, when the price is $2 per cup, the quantity demanded is

FIGURE 2.1 Sally's Demand Curve for Coffee

Each point on the demand curve says how many cups of coffee Sally will demand, given the price. Point *A*, says that at $2 per cup, Sally will demand 15 cups of coffee in a week. Point *B* corresponds to a price of $3 and a quantity demanded of 12 cups.



15 cups. So we find that price on the vertical axis, and go from left to right until we reach 15 cups per week (point *A* on graph). That becomes a point on the demand curve. Next, when the price is $3 per cup, the quantity demanded is 12 cups. We find the price $3 on the vertical axis and move right until we reach 12 cups (point *B*).

We do this for every price, and then we connect the points in a line, called a **demand curve.** The demand curve shows the link between price and quantity demanded. It is the graphical counterpart to the demand schedule.

The result is known as a **downward-sloping demand curve** because the curve we plotted from our data starts at the top left side of the graph and slopes downward to the right. The law of demand suggests that most demand curves will slope downward because price increases reduce the quantities demanded, all other things being equal.

HOW PRICE AFFECTS THE QUANTITY SUPPLIED

Now we turn our attention to the supply side of markets. Let's start by looking at the market for new homes. In 2000 the average sale price of a new single-family house in the United States was $207,000. By 2005 the average sale price of a new single-family home had risen to $297,000, a big jump in only five years.

How did home builders react to this enormous increase in the price of their product? They began constructing a lot more houses in every part of the country. The pace was frenetic: In 2005 home builders started almost 1.7 million new homes, up from 1.2 million in 2000. With prices so high, they built homes wherever they could find the space—even in the middle of deserts.

The process worked in reverse as well. When housing prices began to plummet in 2007, it became a lot less worthwhile for home builders to put up new homes. By 2009 new home construction had almost completely dried up.

In any market, the **quantity supplied** by a particular seller is the amount of goods and services that the seller is willing to provide at a given price. As the price changes, the quantity supplied changes as well. The **supply schedule** for a good or service reports the quantity supplied at different selling prices.

Let's think about the supply schedule for women's haircuts. A hair salon hires hairstylists, who are available to shape, trim, and dry the hair of

anyone who walks through the door. For simplicity, assume it takes an hour to give a good haircut. So the quantity supplied of haircuts at any price in this market is determined by the number of hairstylists employed.

Notice that the quantity supplied of haircuts can exceed the quantity demanded. What does this mean? The stylists may spend part of the day not giving haircuts but reading the newspaper next to an empty chair or sweeping the floor while waiting for customers. But as long as they are available if and when someone comes in wanting a haircut, their time at work is part of the supply of haircuts.

Let's take a look at a hypothetical supply schedule for Helen's Haircutting Salon, as shown in Table 2.3. At a price of $5, there are only 40 haircuts available per week, with perhaps one hairstylist working full-time. As the price per haircut rises, however, running a hair salon becomes much more lucrative. At $10 per haircut, the number of haircuts available is 60 (perhaps because the existing stylist works extra hours during the week). As the price rises further, more people are put to work. At $35 per haircut, 160 haircuts are available, which reflects employment of perhaps four stylists, each working a 40-hour week and taking one hour for each haircut.

The **market supply schedule** adds up the quantity supplied by all the sellers in a market. For example, suppose there are 10 haircutting salons in a town, all with the same supply schedule as Table 2.3. Then if the price per haircut is $20, there will be a total of 1,000 haircuts supplied (100 haircuts × 10 stores).

The Law of Supply

The **law of supply** says that higher prices tend to increase the quantity supplied of a good or service, assuming nothing else changes. If the price a business can get for its goods and services rises, it has an incentive to increase production. There are plenty of ways to do that. It can hire more workers; it can have existing workers put in longer hours; it can open up a new store or a new factory; it can buy new computers or new machinery to beef up its productive capabilities.

Suppose the market price of a haircut goes up. That will make it more attractive for a hair salon to hire more stylists. It will also increase the willingness of would-be entrepreneurs to open up their own businesses. But if the price goes down, haircutting will be less profitable; some hairstylists will be let go or be given reduced hours; and some existing salons may close. The quantity supplied will drop along with the price. This is part of the natural ebb and flow of markets.

The law of supply operates in global markets as well. Suppose a department store chain is selling blue shirts imported from China. If the price of that kind of shirt goes up—perhaps because men are dressing better—the department store chain will order more shirts from its supplier in China. The Chinese factory will need a little time to respond because it must first hire more workers and train them. But higher prices increase the quantity supplied, even though it may take a while.

A key market where the law of supply generally holds is the labor market. The price of labor is the wage rate—that is, the price per hour a worker gets paid. Generally

TABLE 2.3 The Supply Schedule for Helen's Haircutting Salon

For any price of a haircut, this table reports how many haircuts are supplied.

Price per Haircut (Dollars)	Quantity Supplied (Haircuts Available in a Week)
$ 5.00	40
$ 10.00	60
$ 15.00	80
$ 20.00	100
$ 25.00	120
$ 30.00	140
$ 35.00	160

SPOTLIGHT: THE GREAT ETHANOL BOOM

For an example of the law of supply in action, look no further than the great corn ethanol boom of 2007. As the name suggests, corn ethanol, an alternative to gasoline, is made from corn. In 2007 the growing demand for ethanol sent the price of corn soaring from roughly $2.00 a bushel in 2005 to $4.20 a bushel in 2007.

Farmers, the main suppliers of corn, responded to the rising price by increasing the quantity supplied. They planted more corn—a lot more corn. The result was the largest corn crop in history at the time: 13.0 billion bushels.

Not all farmers were happy about the higher price of corn, however. In particular, farmers raising pigs and cattle were used to feeding corn to their animals. As it grew more expensive, they had to find alternative sources of feed or reduce the number of pigs and cattle they were raising.

Source: U.S. Department of Agriculture.

speaking, a higher wage rate will not have much effect on the labor supplied by people who are already working full-time. However, economic research generally shows that higher wages do increase the labor supply of people who are less committed to working, such as teenagers.

Like the law of demand, the law of supply does not hold true in every circumstance. In some cases, an increased price can lower supply. For example, suppose your goal is to work enough hours during a semester to pay your expenses—let's say $2,000. If you earn $10 an hour, you will have to work 200 hours to achieve your goal. But if you earn $20 an hour, it will take only 100 hours to earn enough to pay your expenses—so a higher price for your labor will decrease, not increase, the amount of labor you supply. However, in most situations the law of supply does hold.

LAW OF SUPPLY
A higher price tends to increase the quantity supplied, all other things equal.

Graphing the Supply Schedule

Just as we did with the demand schedule on page 29, we can plot the supply schedule for a market on a graph. Let's think about a suburban town where home owners hire other people to mow their lawns. They might be paying neighborhood teenagers or a landscape service.

The market price per lawn determines the quantity of lawn-mowing services supplied. If the price is high, then teenagers tear themselves away from their video games and offer to mow their neighbors' lawns, and landscape services hire more workers.

Table 2.4 shows a hypothetical market supply schedule for the lawn-mowing market in a town. As the market price per lawn increases, so does the quantity supplied.

Now let's plot this supply schedule on a graph (Figure 2.2). Going up the vertical axis are the various prices that could be charged per lawn. Going across the horizonal axis is the quantity supplied—the number of lawns mowed. To plot the supply schedule, we start with a price on the vertical axis and move right horizontally until we come to the number of lawns mowed.

For example, if the market price is $10 per lawn, the supply schedule tells us that the quantity supplied is 15 mowed lawns. That's point *A* in Figure 2.2. Plotting all the combinations of price and quantity supplied and connecting the points gives us the **supply curve.** The supply curve shows the link between the price and the quantity supplied.

The result is an **upward-sloping supply curve** that starts at the lower left corner and goes to the upper right corner of the graph. We have drawn it as a straight line, but real-world supply curves are generally not straight.

TABLE 2.4 The Market Supply Schedule for Lawn Mowing

As the price to mow a lawn rises, so does the quantity supplied. For example, if the going market price for mowing a lawn in a town is $15, then suppliers make themselves available to mow 25 lawns.

Market Price per Lawn Mowed (Dollars)	Quantity Supplied (Lawns Mowed per Week)
$ 5.00	5
$ 10.00	15
$ 15.00	25
$ 20.00	35

NEW MARKETS

Here's one final note for this chapter. Demand and supply schedules describe how buyers and suppliers behave in existing markets, but the number of markets is not fixed. **New markets** are created every day to meet the changing needs of consumers and to take advantage of the changing capabilities of producers. New markets can provide new products or services, or bring in new buyers and sellers.

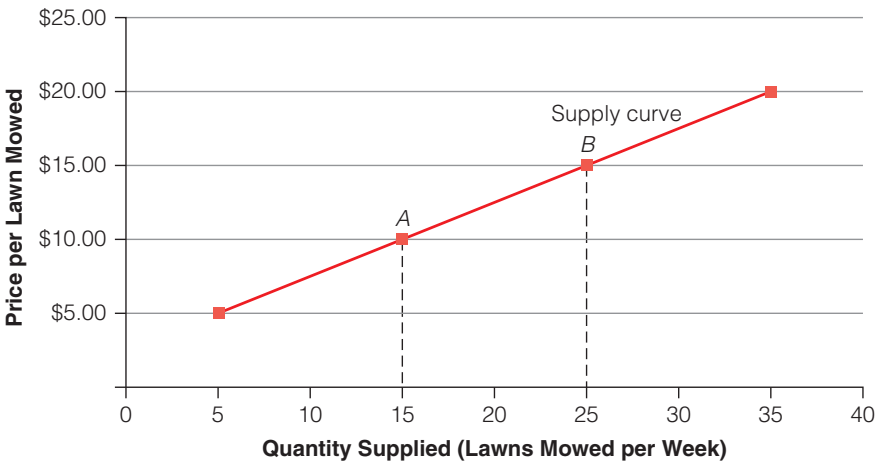
Some goods and services we buy today were not available 10, 20, or 30 years ago or were not available in the same form. We're surrounded by new technologies and new products—everything from the iPad to the latest product for hair straightening. New types of services, too, have proliferated, such as web design—a new market that didn't exist before the mid-1990s.

New markets also arise as incomes rise in developing countries like China. For example, as recently as the early 1990s, few families owned cars in China. But as the country grew richer and incomes soared, the market for automobiles in China went from minuscule to enormous almost overnight.

We will return to the notion of new markets in Chapters 13, 14, and 15 when we look at financial markets, globalization, and technological change in more detail. For now, keep in mind that one of the biggest positives of a market economy is its ability to adapt quickly to changing circumstances.

FIGURE 2.2 The Market Supply Curve for Lawn Mowing

Each point on the market supply curve says how many lawns suppliers are willing to mow, given the price. Point *A* says that at $10 per lawn, the quantity supplied is 15 mowed lawns. Point *B* corresponds to a price of $15 and a quantity supplied of 25 lawns.



SUMMARY

1. Markets are composed of buyers and sellers who exchange goods and services for money at a rate called the price. Markets can be local, national, or global. (LO2-1)
2. A demand schedule describes the behavior of buyers in a market. For each price, the demand schedule reports the quantity demanded at that price. A demand curve is usually downward-sloping, which means that the quantity demanded drops as the price increases. (LO2-2)
3. A supply schedule describes the behavior of sellers in a market. For each price, the supply schedule reports the quantity supplied at that price. A supply curve is usually upward-sloping, which means that the quantity supplied increases as the price increases. (LO2-3)
4. The number of markets is not fixed. New markets can provide new goods or services or bring in new buyers and sellers. (LO2-4)

KEY TERMS AND CONCEPTS

market economy
buyers
sellers
product
price
labor market
local market
national market
global market
multinational
market price
sale price
negotiated price
volume discount
advance purchase discount
quantity demanded
demand schedule
market demand schedule
ceteris paribus
law of demand
zero price
satiation
opportunity cost
demand curve
downward-sloping demand curve
quantity supplied
supply schedule
market supply schedule
law of supply
supply curve
upward-sloping supply curve
new markets

connect ECONOMICS PROBLEMS

1. Which of the following is an example of a buyer in a market? (LO2-1)
   a) An airline selling seats on a flight.
   b) A student paying for a haircut.
   c) A restaurant selling a meal.
   d) An amusement park selling admissions to a ride.

2. Which of the following is an example of a global market? (LO2-1)
   a) The market for haircuts in New York City.
   b) The market for dry cleaning in a town.
   c) The market for homes in Dallas.
   d) The market for crude oil.
3. The _____ is the typical price at which a good or service sells in a market. (LO2-1)
   a) sale price
   b) market price
   c) negotiated price
   d) volume discount
4. When a person becomes unwilling to consume more of a good even at a zero price, he or she has reached _____ (LO2-2)
   a) market price.
   b) ceteris paribus.
   c) satiation.
   d) sale price.
5. The demand curve is the graphical representation of the _____ (LO2-2)
   a) opportunity costs.
   b) sale prices.
   c) supply schedule.
   d) demand schedule.
6. Sam lives in a small town with only one restaurant. The restaurant, run by an eccentric old gentleman, offers a dinner menu on which every dish is the same price. Each month he posts the price of the meal in the window. The following table lists the number of times Sam goes out to dinner at the restaurant during the month, according to the posted price of the dinner: (LO2-2)

Price per Meal (Dollars)	Quantity Demanded (Number of Times Sam Eats at the Restaurant in the Month)
$ 3.00	25
$ 6.00	12
$ 9.00	8
$12.00	6
$15.00	4
$18.00	2

   a) Plot the demand curve for meals.
   b) How many times per month does Sam eat at the restaurant if the price per meal is $12?

7. All other things being equal, when the price of a good increases, the quantity supplied typically _____ (LO2-3)
   a) stays the same.
   b) decreases.
   c) increases.

8. In a small town there's only one construction company that builds new homes. The following table lists the number of new homes built in a year at different selling prices: (LO2-3)

Sale Price of a New Home (Dollars)	Quantity Supplied (Number of New Homes Built in a Year)
$150,000	1
$200,000	4
$250,000	7
$300,000	10
$350,000	13

   a) Plot the supply curve for new homes.
   b) How many homes are built if the price is $250,000 per home?

9. Over the past few years, 'smartphones' such as the iPhone have become much more common. Say which of the following statements is true, and explain. (LO2-4)
   a) The rise of the smartphone did not lead to any new markets.
   b) The rise of the smartphone created many new markets, including the market for iPhone applications ('apps).
   c) The only new market created is the market for smart phones.
   d) The price of smart phones is lower than the price of the phones they replace.