# 6 <br> <br> Prices and Decision <br> <br> Prices and Decision Making 

## Why It Matters

Have you ever wondered why famous athletes and entertainers make millions of dollars each year? Imagine that you are one of these athletes or entertainers and will be interviewed on a major television program. Knowing that the interviewer will ask you why you make so much money, prepare a list of 5 to 10 reasons that explain why you are worth your salary. Read Chapter 6 to learn about how economic systems allocate goods and services.

## The BIG Ideas

1. Markets exist when buyers and sellers interact, and market prices are set by the interaction of demand and supply.
2. Governments strive for a balance between the costs and benefits of their economic policies to promote economic stability and growth.

Every day prices help buyers make decisions about the quantities of goods and services they buy.


## GUIDE TO READING

## Section Preview

In this section, you will learn that prices act as signals that help us allocate scarce resources.

## Content Vocabulary

```
- price (p.143) • ration coupon (p.145)
- rationing (p.145) • rebate (p. 146)
```


## Academic Vocabulary

Reading Strategy
Explaining As you read the section, complete a graphic organizer similar to the one below by explaining the advantages of prices.


## PRODUCTS IN THE NEWS

> -New Orleans Times-Picayune

## Katrina Fallout

The local real estate market soared after Hurricane Katrina, with home prices recording double-digit increases and the number of sales remaining surprisingly strong. . . .

During the final four months of 2005-the months after Katrina-the average sale price in the metropolitan area was $\$ 215,769$, or 21 percent higher than the average price of all homes sold in 2004. . . .

The strong real estate figures send the clearest signal yet that the New Orleans housing market is not dead. In fact, they might make the city more appealing than ever to national investors . . . looking to snatch up bargain properties they can sell down
 the road for a profit.

Life is full of signals that help us make decisions. For example, when we pull up to an intersection, we look to see if the traffic light is green, yellow, or red. We look at the other cars to see if any have their blinkers on, signaling their intentions to turn. While these are clear and obvious signals, there are other, more hidden ones. Pain, for example, signals you that something is wrong with your body. But have you ever thought about signals in economics?

It turns out that something as simple as a price-the monetary value of a product as established by supply and demand-is a signal that helps us make economic decisions. Prices give information to buyers and sellers. High prices signal buyers to buy less and producers to produce more. Low prices signal buyers to buy more and producers to produce less. Even housing prices, as we read in the news story above, send signals.
price monetary value of a product as established by supply and demand

## Advantages of Prices

MAIN Idea Prices help the economy run smoothly by providing a good way to allocate resources.

Economics \& You Have you ever seen news reports about rising prices for building materials after a hurricane? Read on to learn how the price system helps us deal with natural disasters.

Prices help producers and consumers decide the three basic questions of WHAT, HOW, and FOR WHOM to produce. Without prices, the economy would not run as smoothly, and allocation decisions would have to be made some other way. Prices perform this function well for several reasons.

First, in a competitive market economy, prices are neutral because they favor neither the producer nor the consumer. Since prices are the result of competition between buyers and sellers, they represent compromises that both sides can live with.

Second, prices in a market economy are flexible. Unforeseen events such as natural disasters and war affect the prices of many
items. Buyers and sellers then react to the new level of prices and adjust their consumption and production accordingly. Before long, the system functions as smoothly again as it had before. The ability of the price system to absorb unexpected "shocks" is one of the strengths of a market economy.

Third, most people have known about prices all their lives. As a result, prices are familiar and easy to understand. There is no ambiguity over a price-if something costs $\$ 1.99$, then we know exactly what we have to pay for it. This allows people to make decisions quickly and efficiently, with a minimum of time and effort.

Finally, prices have no cost of administration. Competitive markets tend to find their own prices without outside help or interference. No bureaucrats need to be hired, no committees formed, no laws passed, or other decisions made. Even when prices adjust from one level to another, the changes are usually so gradual that people hardly notice.

[^0]
## The Global Economy

## Mobility on the Cheap

Americans are constantly in motion. The popularity of cell phones and laptop computers illustrates this point. Luckily for on-the-go consumers, the prices of these mobile products are falling. The average cost of a laptop in 2000 was more than $\$ 2,000$. Each year, the average price has dropped by several hundred dollars.

Competition has played the biggest role in the downward spiral of profits for laptop makers. In 2006, the profit margin for most laptops was only $\$ 50$. This meager profit means that manufacturers are aiming for high sales volume rather than high profit margins. They are also counting on consumers to spend more on expensive accessories, such as service plans, docking stations, and batteries.

How does this competitive market impact you? Consumers can expect lower prices and a wider
selection. In addition, the competition ensures innovation, as manufacturers search for the gadget or accessory that none of us can do without.

Average Laptop Prices


Source: The Wall Street Journal.

## Allocations Without Prices


#### Abstract

MAIN Idea Rationing has disadvantages that are not present in the price system.


Economics \& You How would you allocate goods like cars or food if there were no prices? Read on to learn about the problems associated with other systems.

Prices help us make the everyday economic decisions that allocate scarce resources. But what would life be like without a price system? Would intelligence, good looks, or even political connections determine the allocations?

These criteria may seem far-fetched, but this happens in countries with command economies. When the Baltimore Orioles played an exhibition baseball game in Cuba several years ago, there were not enough stadium seats for the local baseball fans who wanted to attend. Fidel Castro then solved the FOR WHOM questions by giving the seats to Communist Party memberswhether or not they were baseball fans.

## Rationing

Without prices, another system must be used to decide who gets what. One method is rationing-a system under which a government agency decides everyone's "fair" share. Under such a system, people receive a ration coupon, a ticket or a receipt that entitles the holder to obtain a certain amount of a product. The coupon can be given to people outright, or the government can charge a modest fee that is less than the product's market value. Rationing has been widely used during wartime, but it can lead to problems.

## Problems with Rationing

The first problem with rationing is that almost everyone feels his or her share is too small. During the energy crisis of the early 1970s, the government made plans for, but never implemented, gasoline rationing. One problem was determining how to allocate


Rationing This clerk in a grocery store in Cuba accepts ration coupons as payment for the products people are buying. How are ration coupons allocated?
the rationing coupons in a way that everyone would see as fair. A number of ways to allocate gas coupons were debated, but the issue of fairness was never resolved.

A second problem is the administrative cost of rationing. Someone must pay the salaries and the printing and distribution costs of the coupons. In addition, no matter how much care is taken, some coupons will be stolen, sold, or counterfeited and used to get a product intended for someone else.

A third problem is the negative impact on the incentive to produce. What if you were paid with ration coupons and you received the same number of coupons as your coworkers? Without the possibility of earning more coupons, you might lose some of your incentive to work.
$\sqrt{\text { Reading Check }}$ Contrasting What are the differences between the price system and rationing?
rationing system of allocating goods and services without prices
ration coupon permit allowing holder to receive a given amount of a rationed product

财<br>Skills Handbook<br>See page R43 to<br>learn about<br>Comparing and Contrasting.

rebate partial refund of a product's original price

## Prices as a System

MAIN Idea Prices connect all markets in an economy.

Economics \& You Have you noticed ads for rebates on SUVs when gas prices soar? Read on to learn how these rebates are one way in which prices allocate resources between markets.

Because of the difficulties with nonprice allocation systems, economists overwhelmingly favor the price system. In fact, prices do more than help individuals make decisions: they also serve as signals that help allocate resources between markets.

Consider the way in which higher oil prices affected producer and consumer decisions when the price of oil went from under \$35 to over \$70 a barrel in 2005 and 2006. Because the demand for oil is basically inelastic, people spent a greater part of their income on energy. Higher energy costs left them with less to spend elsewhere.

The SUV market was one of the first to feel the effects of high prices. Because most of these vehicles got poor gas mileage, people bought fewer SUVs, leaving dealerships with huge inventories. To move these inventories,
some manufacturers offered consumers a rebate-a partial refund of the original price of the product. The rebate was the same as a temporary price reduction, because consumers were offered thousands of dollars back on each new car they bought. Other dealers offered zero-interest financing.

Finally, automakers had to reduce their production of these vehicles. Ford Motor Company, for example, closed plants, laid off workers, and tried to sell more fuel-efficient cars. Many automobile workers who lost their jobs eventually found new ones in other industries. In the end, the result of higher international oil prices was to shift productive resources out of SUV production into other products. Although the adjustment process was painful for many in the industry, it was a natural and necessary shift of resources for a market economy.

In the end, prices do more than convey information to buyers and sellers in a market: they also allocate resources between markets. This is why economists think of prices as a "system"—part of an informational net-work-that links all markets in the economy.
$\sqrt{ }$ Reading Check Identifying How do prices allocate resources between markets?

## SECTION

## Reviow

## Vocabulary

1. Explain the significance of price, rationing, ration coupon, and rebate.

## Main Ideas

2. Describing What are the advantages of prices?
3. Identifying Use a graphic organizer like the one below to identify the problems associated with rationing.

4. Explaining Why are prices an efficient way to allocate goods and services?

## Critical Thinking

5. The BIG Idea Describe how prices help allocate scarce resources by answering the questions of WHAT, HOW, and FOR WHOM to produce.
6. Analyzing Visuals Look at the photograph on page 145. What effect does rationing seem to have on the number and variety of items in the store?
7. Understanding Cause and Effect Assume that there is a gasoline shortage and your state has imposed rationing. Write a paragraph about how this might affect you, your family, and your community.
Applying Economics
8. Rationing List five items you would like to buy. How does the price of each item affect your decision to allocate scarce resources-your money and your time?

## ense stuay

## 'I Bought It on eBay’

## The World's Online Marketplace

Since its introduction in 1995, eBay has given rise to the phrase "I bought it on eBay." Buyers and sellers flock to the online auction site to bid on and sell everything from snow and math tutoring to collectibles and used cars.

## The Perfect Price

The site serves as an online forum where supply meets demand in a seamless process. Sellers enjoy the advantages of a huge customer base and little overhead. They also have the option to list a "reserve," or minimum price. All of these features help maximize profits. Buyers appreciate the ability to browse millions of items, shop from home, and counter-offer with their own bid.

Because eBay does not produce, sell, or distribute any of the products offered on its Web site, it makes money by charging a modest listing fee and commission for each item sold. In 2005 the number of registered eBay members topped 100 million, including potential buyers in more than 30 countries.


Source: moneycentral.msn.com

Europeans Earning at Least 25\% of Their Income From eBay Business


Source: eBay Inc.

To some members, eBay is a great place to sell an item they no longer need or want, such as a baby stroller or CD. For others, eBay has turned from a hobby into a career. In 2005 more than 700,000 people in the United States earned full- or part-time income on eBay. Many sellers in Europe-especially Britain and Germany-also rely on eBay to make money.

## eBay Express

In 2006 eBay faced serious competition from Google and Yahoo for a larger share of the e-commerce market. The company's response was eBay Express, which allows shoppers to purchase products immediately without waiting a week for an auction to close. The hope is that a brand new audience will tap into the eBay experience.

## Analyzing the Impact

1. Summarizing How is price determined for an item on eBay?
2. Explaining What change did eBay make to attract more shoppers?

# The Price System at Work 

GUIDE TO READING

## Section Preview

In this section, you will learn how economic models help us understand prices in competitive markets.

## Content Vocabulary

- economic model (p. 149) • surplus (p. 150)
- equilibrium price (p.149) • shortage (p. 151)


## Academic Vocabulary

- voluntary (p. 149)
- fluctuates (p. 153)

Reading Strategy
Describing As you read the section, complete a graphic organizer similar to this by describing how a surplus and a shortage affect prices, demand, and supply.


## COMPANIES IN THE NEWS

-adapted from The Miami Herald

## Want Prime Seats? Get Ready to Bid

Bids on the best seats in the house for Madonna's concert . . . could start at the face-value price of $\$ 350$. Do I hear $\$ 450$ ? Going once, going twice . . . Sold! To the person online.

Tired of competition from scalpers, Ticketmaster and its clients are now auctioning "premium seats" to concerts, sports meets, and other events. The practice, dubbed "dynamic pricing," allows customers to set their own prices. Competitors see it differently, saying the practice allows Ticketmaster to scalp its own tickets. (Scalping is a second-degree misdemeanor under Florida state law, punishable by up to 60 days in jail and a $\$ 500$ fine.)
. . . Dynamic pricing endorses a free market eco-
 nomic principle: namely, that the market determines the fair value of a ticket.

One of the most appealing features of a competitive market economy is that everyone who participates has a hand in determining prices. This is why economists consider prices to be neutral and impartial.

The process of establishing a price, as you read in the news story above, can be complicated-or even contentiousbecause buyers and sellers have exactly the opposite hopes and desires. Buyers want to
find good buys at low prices. Sellers hope for high prices and large profits. Neither can get exactly what they want, so some adjustment is necessary to reach a compromise.

Will consumers pay too much for tickets? Most economists would argue that as long as the process is competitive and the transaction voluntary, then the price will be about right under a bidding system.

## The Price Adjustment Process

MAIN Idea In a market economy, prices seek their own equilibrium.

Economics \& You You learned earlier that the price system is flexible. Read on to find out how prices adjust to changes in the economy.

Because transactions in a market economy are voluntary, the compromise that settles the differences between buyers and sellers must be to the benefit of both, or the compromise would not occur.

## A Market Model

To show how the adjustment process works, we use the supply and demand illustration shown in Figure 6.1—one of the more popular "tools" used by economists. The figure illustrates how we can use an economic model to analyze behavior and predict outcomes.

The data in the figure show the demand for and supply of CDs at various prices. You
are already familiar with these numbers, because they are the same ones you saw when you learned about demand in Chapter 4 and supply in Chapter 5. Panel A combines information from the market demand schedule in Figure 4.2 on page 94 and the market supply schedule in Figure 5.2 on page 119. Panel B shows both the market demand curve and the market supply curve, again from those two earlier figures.

Separately, each of these graphs represents the demand or supply side of the market. When the curves are combined, we have a complete model of the market, which will allow us to analyze how the interaction of buyers and sellers results in a price agreeable to all market participants.

Note that the supply and demand curves intersect at a specific point. This point is called the equilibrium price, the price at which the number of units produced equals the number of units sold. It means that at this price there is neither a surplus nor a shortage of the product in the market. But how does the market reach this equilibrium price, and why does it settle at $\$ 15$ rather
economic model a simplified version of a complex behavior expressed in the form of an equation, graph, or illustration (also see page 23)
equilibrium price price where quantity supplied equals quantity demanded

Figure 6.1 Market Equilibrium

| Price | Quantity demanded | Quantity supplied | Surplus/ shortage |
| :---: | :---: | :---: | :---: |
| \$30 | 0 | 13 | 13 |
| 25 | 1 | 11 | 10 |
| 20 | 3 | 9 | 6 |
| 15 | 6 | 6 | 0 |
| 10 | 10 | 3 | -7 |
| 5 | 15 | 0 | -15 |

## B Market Demand and Supply Curves



- The schedules provide the quantities demanded and the quantities supplied at different prices. The last column lists the surpluses or shortages at each price. When the demand and supply at each price are plotted, they show that the curves intersect at a price of $\$ 15$. This is the equilibrium price.


## Economic Analysis Why is the equilibrium price important?

surplus situation where quantity supplied is greater than quantity demanded at a given price

## Skills Handbook

See page R53 to learn about Comparing Data.
than some other price? To answer these questions, we have to examine the reactions of buyers and sellers to different market prices. When we do this, we assume that neither the buyer nor the seller knows the final price, so we'll have to find it using trial and error.

## Surplus

We start on Day 1 with sellers thinking that the price will be $\$ 25$. If you examine the supply schedule in Panel A of Figure 6.1, you see that suppliers will produce 11 units for sale at that price. However, the suppliers soon discover that buyers will purchase only one CD at a price of $\$ 25$, leaving a surplus of 10 .

A surplus is a situation in which the quantity supplied is greater than the quantity demanded at a given price. The 10unit surplus at the end of Day 1 is shown in column four of Panel A in Figure 6.1 as the difference between the quantity supplied and the quantity demanded at the $\$ 25$ price. It is also shown graphically in Panel A of Figure 6.2 as the horizontal
distance between the supply and demand curves at a price of $\$ 25$.

This surplus shows up as unsold products on suppliers' shelves, and it begins to take up space in their warehouses. Sellers now know that $\$ 25$ is too high, and they know that they have to lower their price if they want to attract more buyers and dispose of the surplus.

Therefore, the price tends to go down as a result of the surplus. The model cannot tell us how far the price will go down, but we can reasonably assume that the price will go down only a little if the surplus is small, and much more if the surplus is larger.

## Shortage

Suppliers are more cautious on Day 2, so they anticipate a much lower price of $\$ 10$. At that price, the quantity they are willing to supply changes to three CDs. However, as Panel B in Figure 6.2 shows, this price turns out to be too low. At a market price of $\$ 10$, only three CDs are supplied and 10 are demanded—leaving a shortage of seven CDs.

## Figure 6.2 - Surpluses and Shortages

 Quantity

A surplus occurs when sellers produce more units than buyers will purchase at a given price. A shortage is the result of buyers wanting to purchase more units than sellers offer at a given price. Surpluses will cause prices to drop, and shortages will cause prices to rise until prices reach an equilibrium.

## Graphs In MOtion

See StudentWorks ${ }^{\text {TM }}$ Plus
or glencoe.com.

## Economic Analysis Why did the surplus shown in Panel A occur?



A shortage is a situation in which the quantity demanded is greater than the quantity supplied at a given price. When a shortage happens, producers have no more CDs to sell, and they end the day wishing that they had charged a higher price for their products.

As a result of the shortage, both the price and the quantity supplied will go up in the next trading period. While our model does not show exactly how much the price will go up, we can assume that the next price will be less than $\$ 25$, which we already know is too high.

## Equilibrium Price

If the new price is $\$ 20$ on Day 3, the result will be a surplus of six CDs. This surplus will cause the price to drop again, but probably not below $\$ 10$, which already proved to be too low. However, if the price drops to $\$ 15$, the market will have found its equilibrium price. As you learned earlier, the equilibrium price is the price that "clears the market" by leaving neither a surplus nor a shortage at the end of the trading period.

While our economic model of the market cannot show exactly how long it will take to reach equilibrium, the temporary
surpluses and shortages will always be pushing the price in that direction. Whenever the price is too high, the surplus will tend to force it down. Whenever the price is too low, the shortage will tend to force it up. As a result, the market tends to seek its own equilibrium.

When the equilibrium price of $\$ 15$ is finally reached, it will tend to remain there because the quantity supplied is exactly equal to the quantity demanded. Something could come along to disturb the equilibrium, but then new shortages, new surpluses, or both would appear to push the price toward its new equilibrium level.

Think of how much more difficult it would be to reach an equilibrium price if we did not have markets to help us with these decisions. You already learned that prices are neutral, flexible, understood by everybody, and free of administrative costs. It would be difficult to find another system that works equally well at setting the equilibrium price at exactly $\$ 15$ and the equilibrium quantity at exactly six units. Also, when markets set prices, everybody has a hand in determining the outcome.

[^1]shortage situation where quantity supplied is less than quantity demanded at a given price

## Explaining and Predicting Prices

MAIN Idea Changes in supply and demand can result in changes in prices.

Economics \& You What happens to prices of concert tickets for bands that have become popular? Read on to find out how changes in demand affect prices.

Economists use their market models to explain changes in prices. A change in price is normally caused by a change in supply, a change in demand, or changes in both. Elasticity is also important when predicting how prices are likely to change.

## Change in Supply

Consider agriculture, which often experiences wide swings in prices from one year to the next. A farmer may keep up with all the latest developments and have the best advice experts can offer, but the farmer can never be sure what price to expect for the
crop. For example, a soybean farmer may put in 500 acres of beans, hoping for a price of $\$ 9$ a bushel. However, the farmer also knows that the actual price may end up being anywhere from $\$ 5$ to $\$ 20$.

Weather is one of the main reasons for variations in agricultural prices. If it rains too much after planting, the seeds may rot or be washed away and the farmer must replant. If it rains too little, the seeds may not sprout. Even if the weather is perfect during the growing season, rain can still interfere with the harvest. The weather, then, often causes a change in supply.

The result, shown in Panel A of Figure 6.3, is that the supply curve for agricultural products is likely to shift, causing the price to go up or down. At the beginning of the season, the farmer may expect supply to look like curve S. If a bumper, or record, crop is harvested, however, supply may look like $\mathbf{S}^{1}$. If severe weather strikes, supply may look like $\mathbf{S}^{2}$. In either case the price of soybeans is likely to change dramatically.

## Figure $6.3>\quad$ Changes in Prices

## A) FOOD Prices



B Energy Prices


The supply and demand curves are both inelastic. Panel A illustrates how a change in supply due to weather can cause a large change in food prices. Panel B shows that a large price change will also take place if there is a change in demand.

## Economic Analysis What would cause a change in the market demand for food?

## Change in Demand

A change in demand, like a change in supply, can affect the price of a good or service. All of the factors we examined in Chapter 4-changes in income, tastes, prices of related products, expectations, and the number of consumers-affect the market demand for goods and services. One example is the demand for oil.

In Panel B of Figure 6.3, a modest increase in demand, illustrated by a shift from D to $\mathbf{D}^{1}$, causes a large increase in the price. This is exactly what happened in 2005 and 2006 when economic growth in the U.S. economy and the rest of the world, especially China and India, increased the demand for energy. Because both the supply and the demand for oil are inelastic, the price of oil increased dramatically. On the other hand, if the world economy had declined instead, demand would have shifted to $\mathrm{D}^{2}$, bringing the price of oil down.

## Change in Supply and Demand

In the real world, changes in both supply and demand often affect prices. For example, we know that strong economic growth in 2005 caused the demand curve for oil to increase (or shift to the right), which drove prices up.

To make matters worse, hurricanes Katrina and Rita tore through the Gulf of Mexico, destroying and disabling hundreds of drilling platforms, refineries, and storage facilities. This caused the supply of oil to decrease (or shift to the left), driving the price of gasoline even higher. The resulting combination of increased demand and decreased supply gave the U.S. economy some of the highest energy prices it had seen since the 1970s.

## The Importance of Elasticity

Whenever supply or demand for a product fluctuates, the elasticity of the two curves affects the size of the price change. To illustrate, both curves are relatively inelastic in Figure 6.3. If you look at Panel A,
you can see that the change in price is relatively large when supply changes. Panel B shows that the change in price is also large when demand shifts. If one or both curves are elastic, though, the change in price will be smaller.

Fortunately, as we saw in Chapters 4 and 5 , there are ways for us to determine the elasticity of both supply and demand. This means that we can predict how prices are likely to change if we know the elasticity of each curve and the underlying factors that cause the supply and demand curves to change.

## CAREERS

## Real Estate Agent

## The Work

* Assist in renting, selling, and buying property for clients
* Obtain listings (owner agreements to place properties for rent or sale), advertise the property, and show the property to prospective renters and buyers



## Qualifications

* Knowledge of fair-market values, zoning laws, local land-use laws, housing and building codes, insurance coverage, mortgage and interest rates
* Highly ambitious, flexible schedule, extensive social and business connections
* High-school diploma, at least 18 years old, state real estate license
* College courses in real estate, finance, business administration, statistics, economics, law, and English helpful


## Earnings

* Median annual earnings (including commissions): \$35,670


## Job Growth Outlook

* Average

Source: Occupational Outlook Handbook, 2006-2007 Edition

Competitive

## Markets

In competitive markets, sellers need to adjust their prices to attract buyers.
Why do economists like competitive markets?

SECTION

by Jim Unger

"Well look at that! The store across the street has the same binoculars for $\$ 15$ less."

## Prices and Competitive Markets

Economists like to see competitive markets because the price system is more efficient when markets are competitive. A perfectly competitive market requires a set of ideal conditions and outcomes that are seldom found in the real world, but fortunately
markets don't have to be perfect to be useful. As long as prices are allowed to adjust to new levels in response to the pressures exerted by surpluses and shortages, prices will perform their role as signals to both consumers and producers.

The great advantage of competitive markets is that they allocate resources efficiently. As sellers compete to meet consumer demands, they are forced to lower the prices of their goods. This in turn encourages them to keep their costs down. At the same time, competition among buyers helps prevent prices from falling too far.

In the final analysis, a competitive market economy is one that "runs itself." There is no need for a bureaucracy, planning commission, or other agency to set prices, because the market tends to find its own equilibrium. In addition, the three basic economic questions of WHAT, HOW, and FOR WHOM to produce are decided by the participantsthe buyers and sellers-in the market.

## $\sqrt{ }$ Reading Check Explaining How does the

 elasticity of a good affect its price?
## Review

## Vocabulary

1. Explain the significance of economic model, equilibrium price, surplus, and shortage.

## Main Ideas

2. Determining Cause and Effect Use a graphic organizer like the one below to show how a change in demand or supply affects the price of a product.

3. Explaining How does the elasticity of supply and demand for a product affect the size of a price change?

## Critical Thinking

4. The BIG Idea Explain why competitive markets allocate resources efficiently.
5. Making Inferences What do merchants usually do to sell items that are overstocked? What does this tell you about the equilibrium price for the product?
6. Understanding Cause and Effect What will happen to the price you pay for concert tickets if a popular group has to move its show to a smaller facility? Why?
7. Analyzing Visuals Look at Figure 6.2 on p. 150. Create a graph showing what will happen at a price of $\$ 20$.

## Applying Economics

8. Equilibrium Price Select a product that appears in newspaper ads of several different stores. Note the various prices and indicate whether any of these prices are sale prices. What does the information tell you about the equilibrium price of the product you selected?

## BusinessWeek NEwSCLIP

The beauty of the supply and demand system lies in its ability to set prices. If demand is high and supply low, prices skyrocket and producers increase supplies. Simple, right? What happens, though, if suppliers are unable keep up with rapidly growing demand?

## What's Raining on Solar's Parade?

The solar power industry has been on a tear, growing at more than $30 \%$ per year for the last six years. It's poised to reach a surprising milestone within two years, when it will gobble up more silicon for its electricity-generating panels than semiconductor makers use in all their chips and devices. . . .

So what's the problem? "Global demand is stronger than the existing supply," says Lee Edwards, president and CEO of BP Solar. His company and others can't buy enough of the ultrapure polysilicon now used in $91 \%$ of solar panels. The raw material shortage has slashed growth for the industry from more than $50 \%$ in 2004 to a projected $5 \%$ in 2006.

The shortage has caused prices for polysilicon to more than double over the last two years. As

Demand and Price of Silicon


[^2]

Economics 101 teaches, that should prompt producers to expand capacity. But for suppliers such as Michigan-based Hemlock Semiconductor Corp., the world's largest producer, the decision hasn't been easy. For one thing, the company was badly burned in 1998. It had just built a new facility in response to pleas from semiconductor makers when Asia went into a slowdown. Demand for silicon plunged, and the factory had to be shuttered. . . .

Hemlock finally decided that the industry is real, but only after solar companies agreed to share the risk by signing contracts to buy the future output. So in December the company began an expansion worth more than $\$ 400$ million that will increase silicon production by $50 \%$. Competitors are following suit.
-Reprinted from BusinessWeek

## Examining the Newsclip

1. Understanding Cause and Effect How did the shortage of polysilicon affect its price?
2. Analyzing Why was Hemlock Semiconductor Corp. at first reluctant to increase the production of polysilicon?

# Social Goals and Market Efficiency 

GUIDE TO READING

## Section Preview

In this section, you will learn that governments sometimes use policies that interfere with the market in order to achieve social goals.

## Content Vocabulary

- price ceiling (p. 157)
- minimum wage (p. 158)
- price floor (p. 158)
- target price (p. 159)
- nonrecourse loan (p. 159)
- deficiency payment (p. 159)


## Academic Vocabulary

- arbitrarily (p.157) - stabilize (p. 159)


## Reading Strategy

Explaining As you read the section, complete a cause-and-effect chart similar to the one below by explaining the effects of price ceilings and price floors.

| Policy | Effects |
| :--- | :--- |
| Price ceiling |  |
| Price floor |  |

## ISSUES IN THE NEWS

## Minimum Wage Rise Hurts Students

Maryland small business owners are bemoaning higher labor costs as the state's minimum wage increases today from the federal threshold of $\$ 5.15$ per hour to $\$ 6.15$.
"A dollar an hour is a huge jump-people have no idea how that affects your payroll," said Mike Kostinsky, who owns Sorrento of Arbutus, a pizza restaurant in Arbutus, Md.
. . . Mr. Kostinsky, whose family has owned Sorrento for 41 years, said he typically adds four or five high school students at minimum wage during the summer to allow his 30 or so permanent employees to take
 vacations. As a result of the wage increase, "I won't let anybody go, but I probably won't hire anybody else," he said.

IChapter 2 we examined seven broad economic and social goals that most people seem to share. We also observed that these goals, while commendable, are sometimes in conflict with one another. These goals also have been partially responsible for the increased role that government plays in our economy.

Attempts to achieve one of these goals-economic security-occasionally result in legislation such as the increase
in the minimum wage in Maryland described in the news story above. While the legislation is clearly beneficial to some people, it can be detrimental to others. What is common to all of these situations, however, is that the out-come-wage control-can only be achieved by interfering with the price system and distorting the allocations made in the market.

## Distorting Market Outcomes

MAIN Idea Price ceilings and price floors prevent prices from allocating goods and resources.

Economics \& You Do you think the minimum wage helps you or other people who are looking for jobs? Read on to learn how the minimum wage can affect the job market.

One common way to achieve social goals is to have the government set prices at "socially desirable" levels. When this happens, prices are not allowed to adjust to their equilibrium levels, and the price system cannot transmit accurate information to other buyers and sellers in the market.

## Price Ceilings

Some cities, especially New York City, have a long history of using rent controls to try to make housing more affordable. This is an example of a price ceiling, a maximum legal price that can be charged for a product.

The case of a price ceiling is shown in Figure 6.4. Let us assume that without the ceiling, the market would establish monthly rents at $\$ 900$, which is an equilibrium price because 2.0 million apartments would be supplied and rented at that rate. If authorities think $\$ 900$ is too high, and if they want to achieve the social goals of equity and security for people who cannot afford these rents, they can arbitrarily establish a price ceiling at $\$ 600$ a month.

No doubt renters would love the lower price and might demand 2.4 million apartments. Landlords, on the other hand, would try to convert some apartments to other uses, such as condominiums and office buildings that offer higher returns. Therefore, the supply might only reach 1.6 million apartments at $\$ 600$ per month, leaving a permanent shortage of 800,000 apartments.

Are consumers better off? Perhaps not. More than likely, the better apartments will be converted to condos or offices-leaving the poorer ones to be rented. In addition, 800,000 people are now unhappy because they cannot get an apartment, although they are willing and able to pay for one. Prices no longer allocate apartments. Instead, landlords resort to long waiting lists or other nonprice criteria such as excluding children and pets to discourage applicants.

Rent controls also freeze a landlord's total revenue and threaten his or her profits. As a result, the landlord tries to lower costs by providing the absolute minimum upkeep. In addition, landlords have little incentive to add additional units if they feel rents are too low. Some apartment buildings may even be torn down to make way for shopping centers, factories, or high-rise office buildings.

The price ceiling, like any other price, affects the allocation of resources-but not in the way intended. The attempt to limit rents makes some people happy, until their

## Figure $6.4>\quad$ Price Ceilings

Price Ceiling

$>$ A price ceiling of $\$ 600$ leaves 800,000 people permanently without apartments. Without the ceiling, an additional 400,000 people would have found an apartment at $\$ 900$.
Economic Analysis Why does government sometimes impose restrictions such as price ceilings on the market?
price ceiling highest legal price that can be charged for a product
minimum wage lowest legal wage that can be paid to most workers
price floor lowest legal price that can be paid for a product
buildings begin to deteriorate. Others, including landlords and potential renters on waiting lists, are unhappy from the beginning. Finally, some productive resources-those used to build and maintain apartments-slowly move out of the rental market.

## Price Floors

Other prices are sometimes considered too low, so the government takes steps to keep them higher. The minimum wage, the lowest legal wage that can be paid to most workers, is such a case. The minimum wage in fact is a price floor, or lowest legal price that can be paid for a good or service.

Figure 6.5 uses a minimum wage of $\$ 5.15$ per hour as an illustration of a price floor. At this wage, the supply curve shows that 14 million people would want to offer their services. According to the demand curve for labor, however, only 10 million would be hired, leaving a surplus of 4 million workers without jobs.

## Figure 6.5 Price Floors

Price Floor


At a price floor of $\$ 5.15$ per hour, 10 million workers will be hired. At the equilibrium price of $\$ 4.00$ per hour, 2 million more people would find jobs.
Economic Analysis Who benefits from price floors? Who is placed at a disadvantage?

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The figure also shows that without the minimum wage, the actual demand and supply of labor would establish an equilibrium price of $\$ 4.00$ per hour. At this wage, 12 million workers would offer their services and the same number would be hired-which means that there would be neither a shortage nor a surplus in the labor market.

Most economists argue that the minimum wage actually increases the number of people who do not have jobs because employers hire fewer workers at higher wages. In the case of Figure 6.5, the number of people who lose jobs amounts to 2 million-the difference between the 12 million who would have worked at the equilibrium price and the 10 million who actually work at the higher wage of $\$ 5.15$ per hour.

Is the minimum wage good or bad for the economy? Certainly the minimum wage is not as efficient as a wage set by supply and demand, but not all decisions in our economy are made on the basis of efficiency. The basic argument in favor of the minimum wage is that it raises poor people's incomes and provides a small measure of equity-one of our seven major economic and social goals. A federal minimum wage is evidence that the small measure of equity provided by the minimum wage is preferred to the loss of efficiency.

Finally, it could be argued that the minimum wage is irrelevant because it is actually lower than the lowest wages paid in many areas. Consider the wages in your area, for example. More than likely, most employers pay wages higher than the minimum wage and would not lower them even if the minimum wage were eliminated. Do you think that your employer would pay you less if he or she were allowed to do so? Your response will provide a partial answer to the question.
$\sqrt{ }$ Reading Check Analyzing What are the negative and positive aspects of price ceilings and price floors?

## Agricultural Price Supports

MAIN Idea Government programs to help stabilize prices for farmers have both positive and negative effects.

Economics \& You Do you remember learning in your history class about the plight of farmers during the Great Depression? Read on to find out how the government tried to help farmers.

During the Great Depression of the 1930s, prices plummeted everywhere. Farmers, however, had an even more difficult time because they were having the "bumper yields" illustrated in Panel A of Figure 6.3 on page 152 that pushed prices even lower. Because both the demand for and supply of food were inelastic, farm prices fell much further than other prices in the economy.

To help farmers, the federal government established the Commodity Credit Corporation (CCC), an agency in the Department of Agriculture. The CCC then used a target price, which is essentially a price floor, to help stabilize farm prices.

## Loan Supports

Under one CCC support program, a farmer borrowed money from the CCC at the target price and pledged his or her crops as security in return. The farmer then used the loan to plant, maintain, and harvest the crops. When they were ready for harvest, the farmer had two choices: either sell the crop in the market and use the proceeds to repay the CCC loan, or keep the proceeds of the loan and let the CCC take possession of the crop. The farmer could get at least the target price because the loan was a nonrecourse loan-a loan that carries neither a penalty nor further obligation to repay if not paid back.

## Deficiency Payments

While the CCC loan program helped farmers, it created new problems because the U.S. Department of Agriculture soon
owned enormous stockpiles of food. The deparment had to resort to storing surplus wheat in rented warehouses or on open ground. Surplus milk was made into cheese and stored in underground caves. The military received some of the food, while public schools received other food that they could use in their "free lunch" programs. Still the surpluses grew, leaving politicians to consider how they could support farm prices and avoid holding large surpluses at the same time.

The solution was a new governmentprogram that combined the competitive market with price supports. Farmers sold their crops on the open market for the best price they could get based on demand and supply. The CCC then gave farmers a deficiency payment-a check the government sends to producers to make up the difference between the market price and the target price.
target price price floor for agricultural products set by the government to stabilize farm income
nonrecourse loan agricultural loan that carries no penalty or further obligation if it is not repaid
deficiency payment cash payment making up the difference between the market price and the target price

## Figure 6.6 Deficiency Payments

## Deficiency Payments



- Under the CCC deficiency payment program, a target price such as \$4 per bushel of wheat was set. At this price farmers would produce and sell 10,000 bushels. With 10,000 bushels produced, buyers would pay $\$ 2.50$ per bushel in the marketplace, so the CCC would need to give an additional payment of $\$ 1.50$ per bushel to farmers to hit the target price.
Economic Analysis How much would the farmer have produced and earned without the deficiency payment program?


Federal Land Bank The government currently pays some farmers to not farm in an effort to reduce production and to support farm income. How much land is in the land bank program?
very popular with farmers and today accounts for nearly 10 percent of total farm subsidies.

## Reforming Price Supports

In an effort to make farming responsive to the market forces of supply and demand, Congress passed the Federal Agricultural Improvement and Reform (FAIR) Act in 1996. Under FAIR, "loan rates" took the place of target prices, and temporary cash payments replaced price supports and deficiency payments. Lawmakers hoped that when the law expired, farmers would be experienced enough with the laws of supply and demand to no longer need help.

However, the new payments turned out to be larger than the ones they replaced, and the overall cost of the U.S. farm support programs actually went up. Then, when FAIR was about to expire in 2002, Congress replaced it with the Farm Security and Rural Investment Act of 2002, which provided for even larger price support payments that would last through 2007.

## Continued Agricultural Support

Today, American agriculture is more dependent than ever on subsidies and price supports. In addition to subsidizing basic commodities like rice, corn, sugar, and cotton, crops such as peanuts, sunflower seeds, and mohair are also covered. The amount of land that farmers are paid to not farm has grown to be larger than the state of New York.

Whether this is good or bad depends on your perspective. If you are a taxpayer supplying the funds for these payments, you might think that the government spends too much on these programs. If you are a farmer receiving payments, you are probably glad that the government is supporting the goal of economic security.
$\sqrt{ }$ Reading Check Summarizing What has been the effect of agricultural price supports?

## When Markets Talk

MAIN Idea Markets send signals when prices change in response to events.

Economics \& You Have you heard stories in the news about changes in the stock market when a new government policy was announced? Read on to find out how markets "talk."

Markets are impersonal mechanisms that bring buyers and sellers together. Although markets do not talk in the usual sense of the word, they do send signals in that they speak collectively for all of the buyers and sellers who trade in the markets. Markets are said to "talk" when prices in them move up or down significantly in reaction to events that take place elsewhere in the economy.

Suppose the federal government announced that it would raise taxes to pay off some of the federal debt. If investors thought this policy would not work or that other policies might be better, they might decide to sell some of their stocks and other investments to
buy gold. As a result, stock prices would fall, and the price of gold would rise. In a sense, the market would "talk" by voicing its disapproval of the new tax policy.

In this example, individual investors made decisions on the likely outcome of the new policy and sold stocks for cash or gold. Together, investor actions were enough to influence stock prices and to send a signal to the government that investors did not favor the policy. If investors' feelings were divided

## Hf Skills Handbook

See page R35 to learn about Identifying the Main Idea. about the new policy, some would sell while others bought stocks. As a result, prices might not change, and the message would be that, as yet, the market had not made up its mind.
$\sqrt{ }$ Reading Check Examining Can you think of any other examples of markets "talking"? Explain.

## Review

## Vocabulary

1. Explain the significance of price ceiling, minimum wage, price floor, target price, nonrecourse loan, deficiency payment.

## Main Ideas

2. Determining Cause and Effect Use a graphic organizer like the one below to illustrate how price floors affect quantity demanded and supplied.

3. Explaining Why did the federal government establish agricultural price support programs?
4. Describing How do markets speak collectively for buyers and sellers?

## Critical Thinking

5. The BG Idea Explain why a government would consider imposing a price ceiling or price floor.
6. Analyzing Visuals Look at Figure 6.4 on p. 157. How does the price ceiling affect the relationship between quantity supplied and quantity demanded? Why does the price ceiling make this relationship permanent?
7. Predicting What would happen if the government eliminated all farm subsidies?

## Applying Economics

8. Price Floor Interview 10 classmates who have part-time jobs. Identify where they work and who gets paid at, below, or above the federal minimum wage. Use that information to predict how increasing the federal minimum wage by $\$ 1.00$ per hour would impact employment for teenagers in your area.

## Profiles in teonomics

## Meng (195) (19)

- ranked by Fortune magazine as the "Most Powerful Woman in Business" in 2005
- turned eBay into one of the fastest-growing companies in U.S. history


## Excellence Leads eBay

As president and CEO of eBay Inc. since 1998, Meg Whitman runs the world's leading Internet auction site. Although eBay was invented by software engineer Pierre Omidyar in 1995, it has been Whitman's leadership and branding expertise that made the site a household name.

The year Whitman took over eBay, the company earned about $\$ 6$ million. Seven years into her leadership, the company's revenues grew to \$4.6 billion. Her secret? She works quickly to fix problems, such as removing counterfeit items for auction and instituting PayPal to help streamline the payment process. She asks questions instead of issuing orders, and she shares what she learns with her employees. She also listens to customers and employees and seeks their feedback.

## The Power of All of Us

Business analysts agree that Whitman's success has more to do with her willingness to listen than anything else. As she says, "Our army of users figures out what's hot before we even know." That attitude keeps Whitman in the chat room instead of the boardroom. She reads hundreds of e-mails from users every day, and her "Voice of the Customer" program has been known to reverse business decisions based on user complaints. She trusts what she calls "The Power of All of Us" to sustain a community of users that will essentially guide itself. When eBay management thought car sales would be too complicated and risky, the eBay community demanded the capability. Because Whitman was open to the suggestion, more than 1 million cars have now been sold on eBay. If Meg Whitman were to have a feedback profile similar to the ones kept by the buyers and sellers on eBay, her rating would be high indeed.

## Examining the Profile

1. Summarizing What management techniques have made eBay so successful?
2. Drawing Conclusions Do you think Whitman's philosophy of "The Power of All of Us" could work in other industries? Explain.

## STUDY

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Allocation of Resources Prices are signals that help buyers and sellers make economic decisions. Without prices, societies must find other ways to allocate resources.


D Market Equilibrium When buyers and sellers can freely make production and purchase decisions, the price of a product will move toward market equilibrium. At this point, the quantity supplied is exactly equal to the quantity demanded.

Market Demand and Supply Curves


- Social Goals and Prices The social goals of equity and security sometimes can be achieved only by giving up parts of other goals. Price ceilings or price floors can help achieve these goals, but they may result in fewer goods and services offered overall.

Price Floor



## Assessment \& Activities

## Review Content Vocabulary

Use the terms below to identify the missing cause or effect in the following situations.
a. rationing
d. equilibrium price
b. surplus
e. price ceiling
c. shortage
f. price floor

1. Cause: The government tries to keep prices down by legislating a price ceiling. Effect: $\qquad$
2. Cause: The government wants to allocate scarce goods and services without the help of a price system.
Effect: $\qquad$
3. Cause: A reasonably competitive market experiences brief, minor shortages and surpluses. Effect: $\qquad$
4. Cause: $\qquad$ Effect: New York City has many apartments with very low rents but also has a shortage of apartment units.
5. Cause: A market is at equilibrium, but the product falls out of style before producers can reduce production.
Effect: $\qquad$
6. Cause: $\qquad$ Effect: Farmers receive higher prices for milk and cheese but also experience a surplus.

## Review Academic Vocabulary

7. Create the clues for the crossword puzzle below. Your clues should relate to the chapter content.


## Review the Main Ideas

## Section 1 (pages 143-146)

8. Describe four advantages of using price as an allocating mechanism.
9. Discuss why allocating resources without prices is difficult.
10. Explain why prices are neutral.

Section 2 (pages 148-154)
11. Explain what is meant by the term market equilibrium.
12. Describe the role of shortages and surpluses in competitive markets.
13. Identify three causes of a price change in a market, using a graphic organizer like the one below. Add examples and identify the possible results for each.


Section 3 (pages 156-161)
14. Explain why shortages and surpluses are not temporary when price controls are used.
15. Identify and describe two of the programs that have been used to stabilize farm incomes.
16. Explain what is meant by the statement that "markets talk."

## Critical Thinking

17. The BIG Idea Explain why and how a reasonably competitive market is always moving toward equilibrium.
18. Making Generalizations Some people argue that providing price supports to farmers is unfair to consumers. In a short paper, describe the positive and negative results of these price supports. Then explain why you support or oppose such programs.
19. Making Predictions Suppose that your state wanted to make health care more affordable for everyone. To do this, state legislators put a series of price controlsprice ceilings-in place that cut the cost of medical services in half. In short paragraphs, explain your answers to the following questions:
a. What would happen to the demand for medical services at the new, lower price?
b. What would happen to the supply of medical services that doctors would be willing to provide at the new, lower price?
c. What considerations would new doctors take into account when they decide where to set up their practice? Explain the reasons for your answers.
20. Synthesizing You were invited to speak to a middle school class about the activities available at your school. You brought 20 ballpoint pens with the high school logo, but there were 30 students in the class. What kind of nonprice rationing system would you devise to fairly allocate the scarce item?
21. Predicting Assume that the price of school lunches has become too high, and you need to set a price ceiling to remedy the problem. What would the consequences of such a policy be for both students and the school?

## Math Practice

22. A shoe store is having a sale. The first pair of shoes sells for $\$ 40$. The second pair sells for half price, or $\$ 20$. The next pair sells for half of that, and so on. Create a table like the one below that tracks the total cost of the shoes as each pair is added. Stop when the selling price of the last pair of shoes is less than $\$ 1.50$.

| Number of pairs | Total cost |
| :---: | :---: |
| 1 |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Analyzing Visuals

23. Examine the figure below, then answer the questions that follow.

Price Adjustment Process

a. What is the quantity demanded at a price of $\$ 20$ ? At $\$ 15$ ?
b. What is the quantity supplied at a price of $\$ 10$ ? At a price of $\$ 20$ ?
c. How large is the shortage or surplus at \$5? Explain your answer.
d. If the price started at $\$ 5$ today, what would likely happen to the price tomorrow? Why?

## Thinking Like an Economist

24. Economists like to use cost-benefit analysis to assess the merits of any program. Use this decision-making strategy to evaluate the desirability of continuing rent control. Write a paragraph describing your strategy and results.

## Writing About Economics

25. Persuasive Writing Research newspapers and news magazines for recent articles about the minimum wage. Using what you have learned about price floors and the information in the articles, decide whether you favor or oppose raising the minimum wage. Write a 2 -page paper outlining your views.

## 

## Should College Athletes Be Paid?

College athletes-particularly basketball and football players-rake in millions of dollars for their universities and the National Collegiate Athletic Association (NCAA). Some people argue that these athletes deserve to be compensated for their role in generating this revenue, whereas others maintain that free-ride scholarships and the potential to "go pro" are more than enough compensation.

Can you sift through the debate to determine whether college athletes should receive more than a free college education for their efforts? As you read the selections, ask yourself: Should college athletes be paid?

## PReCOLLEGE ATHLETES SHOULD BE PAID

Vince Young fakes the pass, pulls the ball down and runs for the game-winning touchdown in the national championship game. Those connected with Texas are smiling as one of the greatest players in its storied history has led the Longhorns to a national title. The higher-ups at the school had reason to smile much earlier. . . With the chance to claim a national title also came $\$ 3.5$ million from the [Bowl Championship Series] directly to Texas and another $\$ 14.9$ million distributed among the Big 12 conference teams.

The problem is, the athletes who help schools and conferences make that money do not see a dime of it. They may receive scholarships, but so do students who don't help the school make money in any way. . . . If schools can profit off of student athletes, why should those athletes not be paid for helping schools make money? . . .

Paying [college athletes] would improve quality of play by keeping borderline professional athletes in college. Also, it would help those same players develop their skills so they could make more money at the professional level. -Andrew Zivic, writer for iMPrint Magazine

| NCAA REvENUES |  |
| :--- | ---: |
| - CBS broadcast and marketing rights, including <br> Division I men's basketball tournament | $\$ 453,000,000$ |
| - ESPN broadcast rights for 21 championships, <br> including Division I women's basketball, <br> baseball, ice hockey, and softball | $\$ 13,000,000$ |
| - Other broadcast rights | $\$ 4,450,000$ |
| - Division I men's basketball tickets | $\$ 27,870,000$ |
| - Tickets for other Division I championships | $\$ 13,175,000$ |
| - Tickets for Division II and III championships | $\$ 705,000$ |
| - Investments, fees, and services | $\$ 8,790,000$ |
| - Membership dues | $\$ 1,010,000$ |

Source: IndyStar.com, 2005-2006 NCAA Revenues

## -on COLLEGE ATHLETES SHOULD NOT BE PAID

As my opening kick against this notion, please accept the obvious premise that college athletes do trade on their skill for financial gain. This gain is realized in the form of a scholarship. . . . Four (or five) years on a free ride at, say, the University of Michigan can cost a person well over 100,000 [dollars]. . . .

How much loot-gathering should be attributed to the play of [a] backup left guard? How about the second-string corner? Should there be a salary scale that bestows a stipend commensurate with the player's productivity? What a hayride that would be to administrate. . . .

Another problem with paying or subsidizing college athletes is the danger of tipping an

| NCAA EXPENDITURES <br> * The NCAA maintains that 95 percent of its money is returned to the membership via direct payments or event services. |  |
| :---: | :---: |
| - Division I athletic departments and conferences | 29,435,000 |
| - Division I conferences, based on performance in the men's basketball tournament | \$122,800,0 |
| - Division I academic support; need-based emergency aid for players; "student-athlete opportunity fund" | \$55,357, |
| - Division I championships and other programs, including team travel and officials | \$55,100,800 |
| - Division II and III expenditures | 39,411,00 |
| - Association-wide expenses, including insurance, enforcement, communications, and legal services | \$87,779,400 |
| - General administration | \$22,83 |
| - Legal contingencies; president's reserve; endowment | \$9,280 |

Source: IndyStar.com, 2005-2006 NCAA Revenues already unbalanced playing surface. While it's assumed that most Division I schools are rolling in dough, reality finds many athletic departments in the red. At more than a few schools, some of the low-revenue sports often are sacrificed. Schools with huge football revenues-such as Michigan, Texas, Ohio State, and USC-would have an even bigger advantage if paying players became an option.
-Randy Hill, writer for FOXSports.com


## Analyzing the Issue

1. Identifying What are the arguments in favor of paying college athletes to play?
2. Summarizing What reasons does Hill give against paying college athletes?
3. Deciding With which opinion do you agree? Explain your reasoning.

[^0]:    $\sqrt{ }$ Reading Check Summarizing In what way do prices perform the allocation function?

[^1]:    $\sqrt{ }$ Reading Check Summarizing How do surpluses and shortages help establish the equilibrium price?

[^2]:    Sources: Riper Jaffray, www.renewableenergyaccess.com

    * 2007 figure for price is estimated.
    $\dagger$ 2005-2008 figures for demand are estimated.

