UNIT 1

Fundamental Economic Concepts

CHAPTER 1
What Is Economics?

CHAPTER 2
Economic Systems and Decision Making

CHAPTER 3
Business Organizations

Because of scarcity, societies have to make careful choices about how to use resources such as energy and land.

Jim Wark/Lonely Planet Images

Jim Wark/Lonely Planet Images

Resumen en español

Spotlight VIDEOS

CHAPTER 1

What Is Economics?

Why It Matters

Congratulations on being selected to head up the prom committee! Now you must decide on location, music, and refreshments. What factors do you need to consider when making your choices? In groups of four, determine your budget and identify possible locations, music providers, and food. Read Chapter 1 to learn how your prom selections, like all economic decisions, require you to make choices about how to best use limited resources.

The BIG Idea

Scarcity is the basic economic problem that requires people to make careful choices about how to use limited resources.

Because of limited resources, consumers must make choices.

Economics ONLINE **Chapter Overview** Visit the *Economics: Principles and Practices* Web site at glencoe.com and click on *Chapter 1–Chapter Overviews* to preview chapter information.

SECTION 1

Scarcity and the Science of Economics

GUIDE TO READING

Section Preview

In this section, you will learn why scarcity is the basic economic problem that faces every society and why scarcity requires us to make choices.

Content Vocabulary

- scarcity *(p. 6)*
- economics *(p. 6)*
- need *(p. 6)*
- want *(p. 6)*
- factors of production *(p. 8)*
- land *(p. 8)*
- capital *(p. 8)*
- capital good *(p. 8)*
- labor *(p. 8)*
- entrepreneur *(p. 9)*
- gross domestic product (GDP) *(p. 9)*

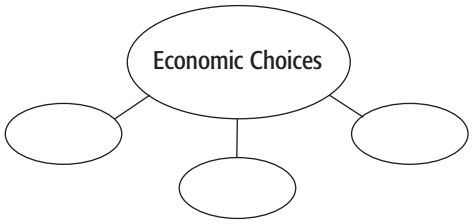
Academic Vocabulary

- resource *(p. 6)*
- comprehensive *(p. 10)*

Reading Strategy

Listing As you read the section, complete a graphic organizer like the one below by listing and describing the three economic choices every society must make.

Interactive Graphic Organizer



PEOPLE IN THE NEWS

–moneycentral.msn.com

Teens in the Red

Like a lot of hard-working women, Andrea Alba has moments of financial despair. Between juggling three jobs, paying her bills and trying to get out of debt, she feels overwhelmed. "I just want to pay everything off," she says. "I wish I didn't have to struggle so much." But Alba is no debt-weary baby boomer. She's only 19 and a couple of years out of high school.

Her financial burdens may be heavier than other teens: She pays her own college tuition and also helps pay the rent and utilities at home. But the sinker was signing that first credit card application before she had even graduated from high school. "It was fine at first," she says. "I used it mainly for gas. Then it just got deeper and deeper." Within a year and a half of her 18th birthday, Alba was $2,500 in the hole. ■

Corbis

You may wonder if the study of economics is worth your time and effort. As you learned in the news story, though, many young people find out about economic issues the hard way. They discover, however, that a basic understanding of economics can help them make sense of the world they live in.

The study of economics helps us in many ways, especially in our roles as individuals, as members of our communities, and as global citizens. The good news is that economics is not just useful. It can be interesting as well, so don't be surprised to find that the time you spend on this topic will be well spent.

Personal Finance Handbook

*See pages **R10–R13** for more information on credit cards.*

scarcity fundamental economic problem of meeting people's virtually unlimited wants with scarce resources

economics social science dealing with how people satisfy seemingly unlimited and competing wants with the careful use of scarce resources

need basic requirement for survival, including food, clothing, and shelter

want something we would like to have but is not necessary for survival

The Fundamental Economic Problem

MAIN Idea Societies do not have enough productive resources to satisfy everyone's wants and needs.

Economics & You Can you remember a time when you saved money to buy something expensive? Was the item a necessity or something that you simply wanted to own? Read on to find out how this relates to the core concepts of economics.

Have you ever noticed that very few people are satisfied with the things they have? For example, someone without a home may want a small one; someone else with a small home may want a larger one; someone with a large home may want a mansion. Whether they are rich or poor, most people seem to want *more* than they already have. In fact, if each of us were to make a list of all the things we want, it would most likely include more things than we could ever hope to obtain.

Scarcity

The fundamental economic problem facing all societies is that of scarcity. **Scarcity** is the condition that results from society not having enough **resources** to produce all the things people would like to have.

As **Figure 1.1** shows, scarcity affects almost every decision we make. This is where economics comes in. **Economics** is the study of how people try to satisfy seemingly unlimited and competing wants through the careful use of relatively scarce resources.

Needs and Wants

Economists often talk about people's needs and wants. A **need** is a basic requirement for survival, such as food, clothing, and shelter. A **want** is simply something we would like to have but is not necessary for survival. Food, for example, is needed for survival. Because many foods will satisfy the need for nourishment, the range of things represented by the term *want* is much broader than that represented by the term *need*.

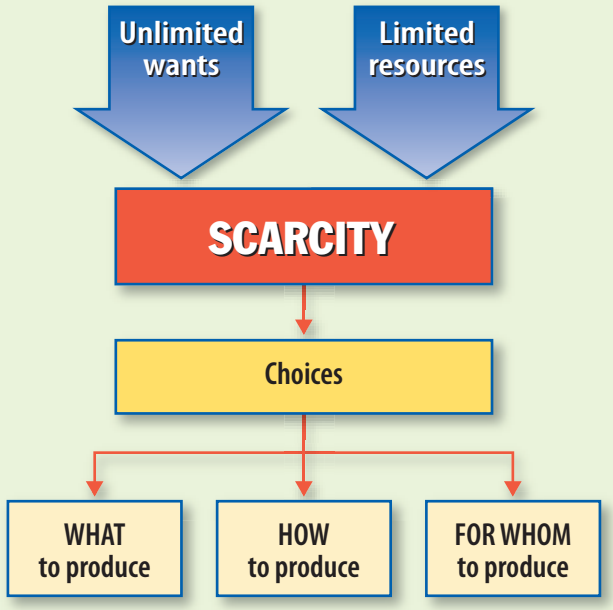
TINSTAAFL

Because resources are limited, everything we do has a cost—even when it seems as if we are getting something "for free." For example, do you really get a free meal when you use a "buy one, get one free" coupon? The business that gives it away still has to pay for the resources that went into the meal, so it usually tries to recover these costs by charging more for its other products. In the end, you may actually be the one who pays for the "free" lunch!

Realistically, most things in life are not free, because someone has to pay for producing them in the first place. Economists use the term *TINSTAAFL* to describe this concept. In short, it means There Is No Such Thing As A Free Lunch.

Reading Check **Contrasting** What is the difference between a need and a want?

Figure 1.1 ▶ **Scarcity**



▶ Scarcity is the fundamental economic problem that forces consumers and producers to use resources wisely.

Economic Analysis ***Why is scarcity a universal problem?***

Three Basic Questions

MAIN Idea Scarcity forces every society to answer the basic questions of WHAT, HOW, and FOR WHOM to produce.

Economics & You When you write a report, you usually answer the who, what, when, where, and why questions. Read on to learn about the three basic questions in economics.

Because we live in a world of relatively scarce resources, we have to make careful economic choices about the way we use these resources. Figure 1.1 presents three basic questions we need to answer as we make these choices.

WHAT to Produce

The first question is WHAT to produce. For example, should a society direct most of its resources to the production of military equipment or to other items such as food, clothing, or housing? Suppose the decision is to produce housing. Should the limited resources be used to build low-income, middle-income, or upper-income housing? A society cannot have everything its people want, so it must decide WHAT to produce.

HOW to Produce

A second question is HOW to produce. Should factory owners use automated production methods that require more machines and fewer workers, or should they use fewer machines and more workers? If a community has many unemployed people, using more workers might be better. On the other hand, in countries where machinery is widely available, automation can often lower production costs. Lower costs make manufactured items less expensive and, therefore, available to more people.

FOR WHOM to Produce

The third question is FOR WHOM to produce. After a society decides WHAT and HOW to produce, it must decide who will receive the things produced. If a society decides to produce housing, for example, should it be the kind of housing that is wanted by low-income workers, middle-income professional people, or the very rich? If there are not enough houses for everyone, a society has to make a choice about who will receive the existing supply.

These questions concerning WHAT, HOW, and FOR WHOM to produce are never easy for any society to answer. Nevertheless, they must be answered as long as there are not enough resources to satisfy people's seemingly unlimited wants and needs.

Reading Check **Analyzing** Why are societies faced with the three basic questions of WHAT, HOW, and FOR WHOM?

WHAT to Produce Societies need to decide whether to include parks in housing areas or to produce more housing. ***How do the three questions help societies make choices about scarce resources?***

Corbis

factors of production productive resources that make up the four categories of land, capital, labor, and entrepreneurs

land natural resources or other "gifts of nature" not created by human effort

capital or **capital goods** tools, equipment, and factories used in the production of goods and services

labor people with all their efforts, abilities and skills

The Factors of Production

MAIN Idea Four factors of production–land, capital, labor, and entrepreneurs–must be present to produce goods and services.

Economics & You When you were younger, did you ever sell something or have a paper route to make money? Read on to find out how this relates to the factors of production.

People cannot satisfy all their wants and needs because productive resources are scarce. The **factors of production**, or resources required to produce the things we would like to have, are land, capital, labor, and entrepreneurs. As shown in **Figure 1.2**, all four are required to produce goods and services.

Land

In economics, **land** refers to the "gifts of nature," or natural resources not created by people. "Land" includes deserts, fertile fields, forests, mineral deposits, livestock, sunshine, and the climate necessary to grow crops. Because a finite amount of natural resources are available at any given time, economists tend to think of land as being fixed, or in limited supply.

Capital

Another factor of production is **capital**, sometimes called **capital goods**—the tools, equipment, machinery, and factories used in the production of goods and services. Capital is unique because it is the result of production. A bulldozer, for example, is a capital good used in construction. When it was built in a factory, it was the result of production involving other capital goods. The computers in your school that are used to produce the service of education also are capital goods.

Labor

A third factor of production is **labor**—people with all their efforts, abilities, and skills. This category includes all people except a unique group of individuals called entrepreneurs, whom we single out because of their special role in the economy. Historically, factors such as birthrates, immigration, famine, war, and disease have had a dramatic impact on the quantity and quality of labor.

Figure 1.2 ▶ The Factors of Production

▶ The four factors of production are necessary for production to take place.

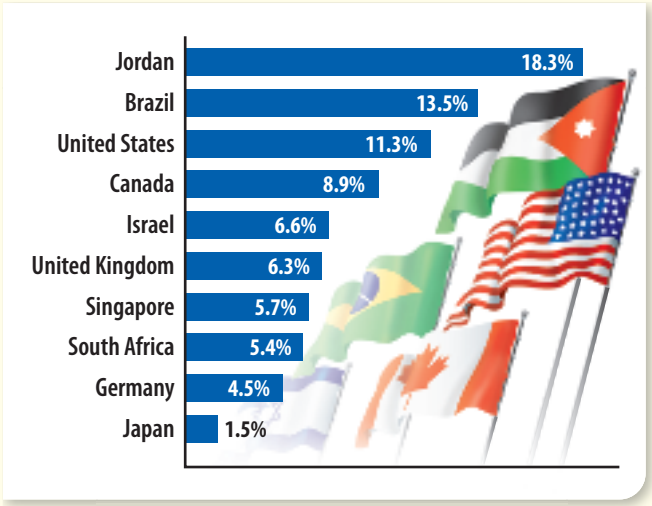
Economic Analysis ***What four factors of production are necessary to bring clothing to consumers?***

The Global Economy & YOU

Global Entrepreneurs Drive the Economy

Every time you get paid for baby-sitting, mowing the lawn, or being the deejay at an event, you have joined the "force"–the global entrepreneurial force, that is. A vast majority of the more than 20 million businesses in the United States are owned by entrepreneurs. Most either work alone or have a few employees.

Until recently, the United States led in the percentage of adult entrepreneurs, with an estimated 11.3 percent of Americans starting a new business each year. Today, the small country of Jordan has just over half a million entrepreneurs, but it can boast the highest percentage of individuals attempting to go it alone. That's nearly one in every five adults. The bar graph here illustrates the percentage of the adult population in select countries who are starting new businesses.



Source: 2004 Global Entrepeneurship Monitor (GEM) www.gemconsortium.org

Entrepreneurs

Some people are singled out because they are the innovators responsible for much of the change in our economy. Such an individual is an **entrepreneur,** a risk-taker in search of profits who does something new with existing resources. Entrepreneurs are often thought of as being the driving force in an economy because they are the people who start new businesses or bring new products to market.

Production

Everything we make requires the four factors of production. The desks and lab equipment used in schools are capital goods. Teachers and other employees provide the labor. Land includes the property where the school is located as well as the iron ore and timber used to make the building. Finally, entrepreneurs are needed to organize the other three factors and make sure that everything gets done.

Reading Check **Interpreting** What would happen if one of the factors of production was missing?

The Scope of Economics

MAIN Idea Economics analyzes how societies satisfy wants through careful use of relatively scarce resources.

Economics & You So far, you have learned about the basics of economics. Read on to learn how economists help us make sense of this information.

Economics is the study of human efforts to satisfy seemingly unlimited and competing wants through the careful use of relatively scarce resources. Economics is also a *social science* because it deals with the behavior of people as they deal with this basic issue. The four key elements to this study are description, analysis, explanation, and prediction.

Description

One part of economics describes economic activity. For example, we often hear about **gross domestic product (GDP)**—the dollar value of all final goods, services, and structures produced within a country's borders in a 12-month period. GDP is the

entrepreneur risk-taking individual in search of profits

gross domestic product (GDP) dollar value of all final goods, services, and structures produced within a country's borders during a one-year period

Skills Handbook

*See page **R50** to learn about **Using Bar Graphs.***

most **comprehensive** measure of a country's total output and a key measure of a nation's economic health. Economics also describes jobs, prices, trade, taxes, and government spending.

Description allows us to know what the world looks like. However, description is only part of the picture, because it leaves many important "why" and "how" questions unanswered.

Analysis

Economics analyzes the economic activity that it describes. Why, for example, are the prices of some items higher than others? Why do some people earn higher incomes than others? How do taxes affect people's desire to work and save?

Analysis is important because it helps us discover why things work and how things happen. This, in turn, will help us deal with problems that we would like to solve.

Explanation

Economics also involves explanation. After economists analyze a problem and understand why and how things work, they need to communicate this knowledge to others. If we all have a common understanding of the way our economy works, some economic problems will be easier to address or even fix in the future. When it comes to GDP, you will soon discover that economists spend much of their time explaining why the measure is, or is not, performing in the manner that is expected.

Prediction

Finally, economics is concerned with prediction. For example, we may want to know whether our incomes will rise or fall in the near future. Because economics is the study of both what is happening and what tends to happen, it can help predict what may happen in the future, including the most likely effects of different actions.

The study of economics helps us become more informed citizens and better decision makers. Because of this, it is important to realize that good economic choices are the responsibility of all citizens in a free and democratic society.

Reading Check **Explaining** Why is economics considered to be a social science?

SECTION 1

Review

Vocabulary

1. **Explain** the significance of scarcity, economics, need, want, factors of production, land, capital, capital good, labor, entrepreneur, and Gross Domestic Product (GDP).

Main Ideas

2. **Identifying** What three basic questions must every society answer, and why?
3. **Organizing** Use a graphic organizer similar to the one below to identify and describe the factors of production.

Interactive Graphic Organizer

Factor	Description
Land	

Critical Thinking

4. **The BIG Idea** How can studying economics help us make better choices about how to use scarce resources?
5. **Synthesizing Information** Do you pay to drink from the water fountains at school? Explain why the water is not really free by stating who actually pays for it.
6. **Analyzing Visuals** Look at Figure 1.2. Identify and categorize the factors of production for a business you know, such as your place of employment. What would happen if one of these factors was no longer available?

Applying Economics

7. **Scarcity** How does scarcity affect your life? Provide several examples of items you had to do without because of limited resources, and explain how you adjusted to this situation.

BusinessWeek NEWSCLIP

Entrepreneurs are willing to take risks because they hope to reap great rewards. These rewards may come more quickly for some than for others. Kevin Plank, founder and CEO of Under Armour Inc., proves that it takes sweat to be a successful entrepreneur.

Under Armour—No Sweat

Eleven years ago, Kevin A. Plank was a walk-on football player at the University of Maryland who relished throwing his body at hulking opponents. But he hated how the cotton T-shirts under his uniform got sopping wet with sweat or rain. By then, cycling outfits and football undershorts were made with moisture-wicking synthetic fabrics. Plank, a starter during kickoffs and punts, wondered why not gridiron T-shirts, too? He tore the content label off a pair of his wick-away shorts, bought the same material from a fabric store, and gave a tailor $460 to sew seven shirts. "I set out to build a better football undershirt," he says.

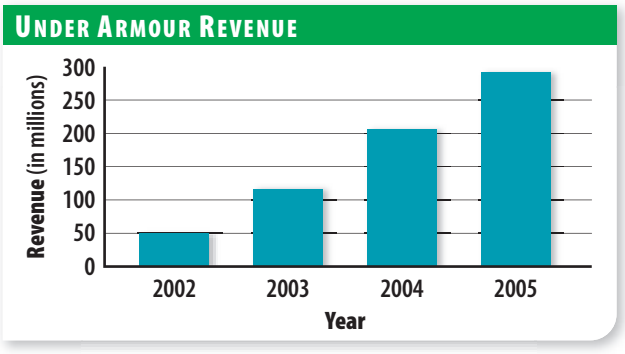
Plank's teammates loved the tees. So he drove to New York's garment district, had hundreds more samples made, and dubbed his invention "Under Armour." Now, at 33, Plank is the multimillionaire head of an athletic apparel powerhouse. . . .

Yet it didn't happen as fast as Plank originally expected. "At 23, I was probably the smartest guy in the world," he jokes. . . . "But I learned early on [that] this is not about one blast of exposure or one person wearing the product."

Operating at first out of his grandmother's Georgetown house, Plank spent four years tirelessly pitching his product to college and NFL teams. "We convinced these big tough football players to start wearing tight-fitting synthetic shirts, which was completely new and different," he says. . . .

The pros' acceptance brings Under Armour an authenticity that advertising alone can't create. . . . That cachet also gives Plank license to charge $40 for a short-sleeve T-shirt.

—Reprinted from *BusinessWeek*



Sources: Businessweek.com, www.123jump.com

Examining the Newsclip

1. **Identifying** How did Kevin Plank get his idea for a new product?
2. **Analyzing** How does Plank exemplify the characteristics of an entrepreneur?

SECTION 2

Basic Economic Concepts

GUIDE TO READING

Section Preview

In this section, you will learn about some key economic terms and concepts.

Content Vocabulary

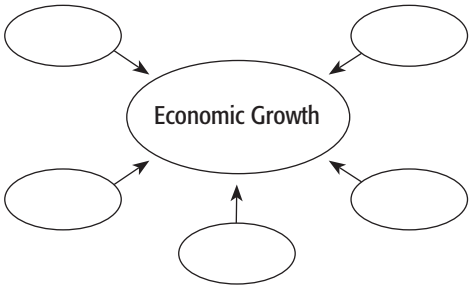
- good *(p. 13)*
- consumer good *(p. 13)*
- durable good *(p. 13)*
- nondurable good *(p. 13)*
- service *(p. 13)*
- value *(p. 14)*
- paradox of value *(p. 14)*
- utility *(p. 14)*
- wealth *(p. 14)*
- market *(p. 15)*
- factor market *(p. 15)*
- product market *(p. 15)*
- economic growth *(p. 16)*
- productivity *(p. 16)*
- human capital *(p. 16)*
- division of labor *(p. 17)*
- specialization *(p. 17)*
- economic interdependence *(p. 17)*

Academic Vocabulary

- transferable *(p. 13)*
- accumulation *(p. 14)*
- mechanism *(p. 15)*

Reading Strategy

Describing As you read the section, describe the factors that lead to economic growth.



Interactive Graphic Organizer

PRODUCTS IN THE NEWS

– Asbury Park Press and the *New York Times*

Comic Books a Big Business

America may have started the worldwide comics craze when U.S. soldiers scattered them around in foreign countries during World War II. Today, they are a global phenomenon—the most widely read literature in the world. According to one published report, 40 percent of all printed material in Japan consists of comics. In the United States, 375 new comic books are sold every month.

The comic-book industry as a whole has had a healthy year. Industry analysts from the Comic Buyer's Guide reported new comics sales of more than $149 million for the first half of 2005, up 6 percent from the period a year earlier. Marvel Entertainment, a publicly traded company that filed for bankruptcy protection in December 1996 and reorganized in July 1998, has recovered strongly in recent years, largely on the strength of its success with movies based on X-Men and Spider-Man. ■

When you hear the word *economics*, you probably think of "big business"—large corporations that run banks and petroleum refineries, or companies that make automobiles, computers and, yes, even comic books. Economics does include big business, but it also includes much more.

Like other social sciences, economics has its own vocabulary and uses terms such as *recession*, *commodity*, or *utility*. To understand economics, a review of key terms is necessary. Fortunately, most economic terms are widely used, and you will already be familiar with many of them.

Goods, Services, and Consumers

MAIN Idea Economic products are goods or services that are useful, relatively scarce, and transferable.

Economics & You Every time you buy something in a store, you act as a consumer. Read on to learn more about this and other basic economic vocabulary.

Economics is concerned with economic products—goods and services that are useful, relatively scarce, and **transferable** to others. Economic products help us satisfy our wants and needs. Because they are both scarce and useful, they command a price.

Goods

There are different types of economic products. The first one is a **good**—a useful, tangible item, such as a book, car, or compact disc player, that satisfies a want. When manufactured goods are used to produce other goods and services, they are called capital goods. An example of a capital good would be a robot welder in a factory, an oven in a bakery, or a computer in a high school. Goods intended for final use by individuals are **consumer goods.**

Any good that lasts three years or more when used on a regular basis is called a **durable good.** Durable goods include both capital goods, such as robot welders, and consumer goods, such as automobiles. A **nondurable good** is an item that lasts for fewer than three years when used on a regular basis. Food, writing paper, and most clothing items are examples of nondurable goods.

Services

The other type of economic product is a **service,** or work that is performed for someone. Services include haircuts, home repairs, and forms of entertainment such as concerts. They also include the work that doctors, lawyers, and teachers perform. The difference between a good and a service is that a good is tangible, or something that can be touched, while a service is not.

Consumers

Consumers are the people who use goods and services to satisfy their wants and needs. As consumers, people indulge in consumption, the process of using up goods and services in order to satisfy wants and needs.

Reading Check **Interpreting** How are goods, services, and consumers related?

good tangible economic product that is useful, relatively scarce, and transferable to others

consumer good good intended for final use by consumers rather than businesses

durable good a good that lasts for at least three years when used regularly

nondurable good a good that wears out or lasts for fewer than three years when used regularly

service work or labor performed for someone

Digital Vision/PunchStock

Consumer Goods These students are using computers in their school computer lab. ***Would you consider computers as durable goods or nondurable goods, and why?***

value monetary worth of a good or service as determined by the market

paradox of value apparent contradiction between the high monetary value of a nonessential item and the low value of an essential item

utility ability or capacity of a good or service to be useful and give satisfaction to someone

wealth sum of tangible economic goods that are scarce, useful, and transferable from one person to another

Value, Utility, and Wealth

MAIN Idea The value of a good or service depends on its scarcity and utility.

Economics & You Has anyone ever thought you paid too much for something? Read on to learn how the value of an item is determined.

In economics, **value** refers to a worth that can be expressed in dollars and cents. Why, then, does something have value, and why are some things more valuable than others? To answer these questions, it helps to review a problem Adam Smith, a Scottish social philosopher, faced back in 1776.

The Paradox of Value

Adam Smith was one of the first people to describe how markets work. He observed that some necessities, such as water, had a very low monetary value. On the other hand, some nonnecessities, such as diamonds, had a very high value. Smith called this contradiction the **paradox of value**. Economists knew that scarcity was necessary for something to have value. Still, scarcity by itself could not fully explain how value is determined.

Utility

It turned out that for something to have value, it must also have **utility**, or the capacity to be useful and provide satisfaction. Utility is not something that is fixed or even measurable, like weight or height. Instead, the utility of a good or service may vary from one person to the next. One person may get a great deal of satisfaction from a home computer; another may get very little. One person may enjoy a rock concert; another may not.

Value

For something to have monetary value, economists decided, it must be scarce *and* have utility. This is the solution to the paradox of value. Diamonds are scarce and have utility, thus they possess a value that can be stated in monetary terms. Water has utility but is not scarce enough in most places to give it much value. Therefore, water is less expensive, or has less monetary value, than diamonds.

The emphasis on monetary value is important to economists. Unlike moral or social value, which is the topic of other social sciences, the value of something in terms of dollars and cents is a concept that everyone can easily understand.

Wealth

In an economic sense, the **accumulation** of products that are tangible, scarce, useful, and transferable from one person to another is **wealth**. A nation's wealth is comprised of all tangible items—including natural resources, factories, stores, houses, motels, theaters, furniture, clothing, books, highways, video games, and even basketballs—that can be exchanged.

While goods are counted as wealth, services are not, because they are intangible. However, this does not mean that services are not useful or valuable. Indeed, when Adam Smith published his famous book *The Wealth of Nations* in 1776, he was referring specifically to the abilities and skills of a nation's people as the source of its wealth. For Smith, if a country's material possessions were taken away, its people, through their efforts and skills, could restore these possessions. On the other hand, if a country's people were taken away, its wealth would deteriorate.

Reading Check **Summarizing** How are value and utility related?

Did You Know?

Value Economists aren't the only ones obsessed with value. Do a simple Google search of "value," and you'll get nearly 2 million hits. You'll get approximately a quarter million if you search for "measure of value," and nearly 140,000 if you search for "measuring value." Maybe that's why economists simply define *value* as "a worth that can be expressed in dollars and cents."

The Circular Flow of Economic Activity

MAIN Idea The economic activity in markets connects individuals and businesses.

Economics & You When you receive a paycheck, do you understand how you fit in the larger economy? Read on to learn about the flow of economic activity.

The wealth that an economy generates is made possible by the circular flow of economic activity. The key feature of this circular flow is the **market,** a location or other **mechanism** that allows buyers and sellers to exchange a specific product. Markets may be local, national, or global—and they can even exist in cyberspace.

Factor Markets

As shown in **Figure 1.3,** individuals earn their incomes in **factor markets,** where the factors of production are bought and sold.

This is where entrepreneurs hire labor for wages and salaries, acquire land in return for rent, and borrow money. The concept of a factor market is a simplified but realistic version of the real world. For example, you participate in the factor market when you work and sell your labor to an employer.

Product Markets

After individuals receive their income from the resources they sell in a factor market, they spend it in **product markets.** These are markets where producers sell their goods and services. Thus, the wages and salaries that individuals receive from businesses in the factor markets returns to businesses in the product markets. Businesses then use this money to produce more goods and services, and the cycle of economic activity repeats itself.

Reading Check **Explaining** What roles do factor markets and product markets play in the economy?

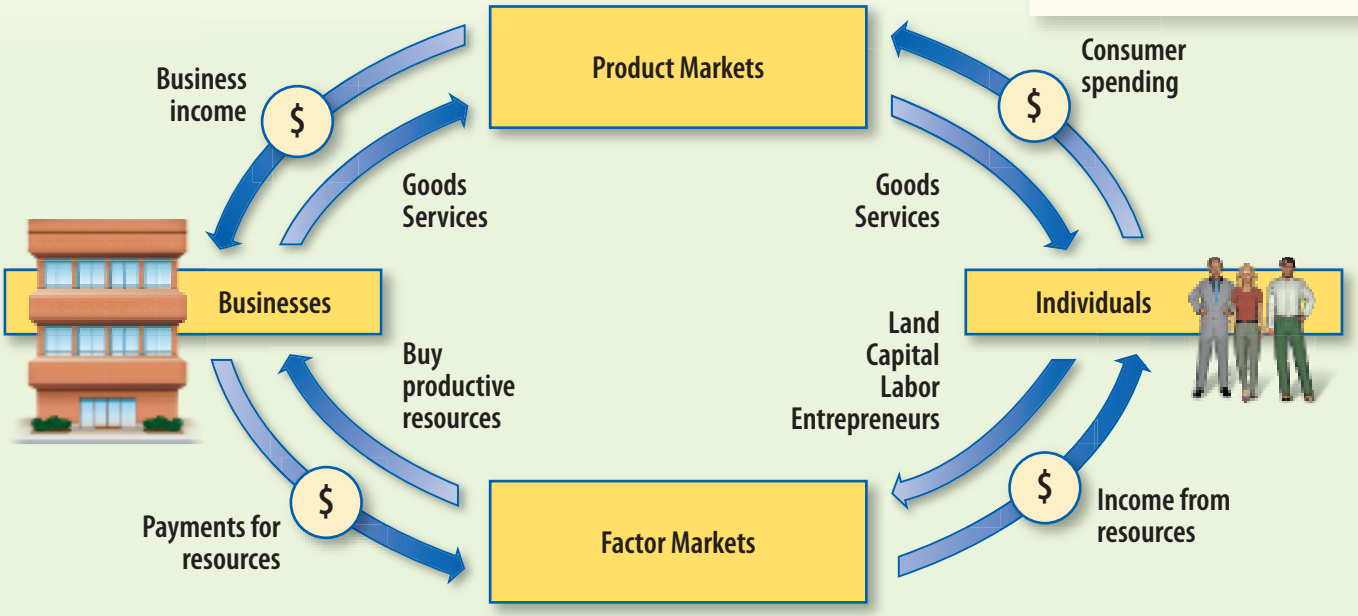
market meeting place or mechanism that allows buyers and sellers to come together

factor market market where the factors of production are bought and sold

product market market where goods and services are bought and sold

Figure 1.3 ▶ **The Circular Flow of Economic Activity**

In Motion **Charts in Motion** See StudentWorks™ Plus or glencoe.com.



▶ The circular flow diagram shows the high degree of economic interdependence in our economy. In the diagram, the factors of production and the products made from them flow in one direction. The money consumers spend on goods and services flows in the opposite direction.

Economic Analysis ***As a consumer, what role do you play in the circular flow of economic activity?***

economic growth
increase in a nation's total output of goods and services over time

productivity
measure of the amount of output produced with a given amount of productive factors

human capital
sum of people's skills, abilities, health, knowledge and motivation

Personal Finance Handbook

*See pages **R16–R19** for more information on education.*

Productivity and Economic Growth

MAIN Idea A nation's economic growth is due to several factors.

Economics & You Have you decided yet what you will do after graduating from high school? Read on to learn how investing in more education now can give you a higher lifetime income.

Economic growth occurs when a nation's total output of goods and services increases over time. This means that the circular flow becomes larger, with more factors of production, goods, and services flowing in one direction and more payments in the opposite direction. Productivity is the most important factor contributing to economic growth.

Productivity

Everyone in a society benefits when scarce resources are used efficiently. This is described by the term **productivity**, a measure of the amount of goods and services produced with a given amount of resources in a specific period of time.

Productivity goes up whenever more can be produced with the same amount of resources. For example, if a company produced 5,000 pencils in an hour, and it produced 5,100 in the next hour with the same amount of labor and capital, productivity went up. Productivity is often discussed in terms of labor, but it applies to all factors of production.

Investing in Human Capital

A major contribution to productivity comes from investments in **human capital**, the sum of people's skills, abilities, health, knowledge, and motivation. Government can invest in human capital by providing education and health care. Businesses can invest in training and other programs that improve the skills of their workers. Individuals can invest in their own education by completing high school, going to technical school, or attending college.

Figure 1.4 shows that investments in education can have substantial payoffs. According to the table, high school graduates earn substantially more than nongraduates, and college graduates make even more than

Figure 1.4 ▶ Effect of Education on Income

▶ Education is one way to invest in human capital.

Economic Analysis ***How does this type of investment pay off for both employers and their employees?***

Education	Average income	
	Males	Females
Less than 9th grade	$19,746	$11,492
9th to 12th grade (no diploma)	$23,747	$13,343
High school graduate or equivalent	$34,700	$20,325
Some college, no degree	$43,531	$25,111
Associate degree	$45,800	$29,031
Bachelor's degree	$65,523	$37,373
Master's degree	$83,189	$48,945
Professional degree	$126,728	$63,322
Doctorate degree	$103,939	$67,676

Source: U.S. Department of Commerce, Bureau of the Census, 2006

high school graduates. Educational investments require that we make a sacrifice today so we can have a better life in the future, and few investments generate higher returns.

Division of Labor and Specialization

Division of labor and specialization can improve productivity. **Division of labor** is a way of organizing work so that each individual worker completes a separate part of the work. In most cases, a worker who performs a few tasks many times a day is likely to be more proficient than a worker who performs hundreds of different tasks in the same period.

Specialization takes place when factors of production perform only tasks they can do better or more efficiently than others. The division of labor makes specialization possible. For example, the assembly of a product may be broken down into a number of separate tasks (the division of labor). Then each worker can perform the specific task he or she does best (specialization).

One example of the advantages offered by the division of labor and specialization is Henry Ford's use of the assembly line in automobile manufacturing. Having each worker add one part to the car, rather than a few workers assembling the entire vehicle, cut the assembly time of a car from a day and a half to just over 90 minutes—and reduced the price of a new car by more than 50 percent.

Economic Interdependence

The U.S. economy has a remarkable degree of **economic interdependence.** This means that we rely on others, and others rely on us, to provide most of the goods and services we consume. As a result, events in one part of the world often have a dramatic impact elsewhere.

This does not mean that interdependence is necessarily bad. The gains in productivity and income that result from specialization almost always offset the costs associated with the loss of self-sufficiency.

Reading Check **Analyzing** What role does specialization play in the productivity of an economy?

division of labor division of work into a number of separate tasks to be performed by different workers

specialization assignment of tasks to the workers, factories, regions, or nations that can perform them more efficiently

economic interdependence mutual dependency of one person's, firm's, or region's economic activities on another's

Skills Handbook
*See page **R40** to learn about **Analyzing Information.***

SECTION 2

Review

Vocabulary

1. **Explain** the significance of good, consumer good, durable good, nondurable good, service, value, paradox of value, utility, wealth, market, factor market, product market, economic growth, productivity, human capital, division of labor, specialization, and economic interdependence.

Main Ideas

2. **Explaining** How do goods and services differ?
3. **Organizing** Use a graphic organizer similar to the one below to describe the different transactions that take place in product markets.

Interactive Graphic Organizer

4. **Describing** How is economic growth related to productivity?

Critical Thinking

5. **The BIG Idea** How is value related to scarcity and utility?
6. **Drawing Conclusions** Why is investing in human capital beneficial?
7. **Analyzing Visuals** Look at Figure 1.3. How can individuals increase the flow of circular activity? What effect would this increase have on the other parts of the economy?
8. **Inferring** How might major events such as labor strikes affect you and your community? Select a possible event and write a brief paragraph about the potential effects.

Applying Economics

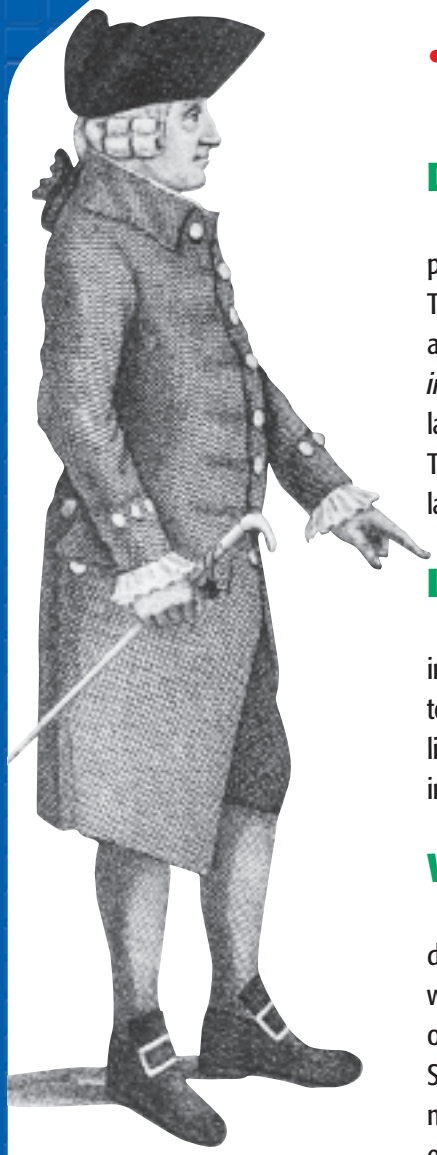
9. **Specialization** Provide at least three examples each of specialized workers and specialized capital that are used in your school to provide the service of education. How would productivity change if they were not available to your school?

ECONOMIST

Profiles in Economics

Adam Smith (1723–1790)

- introduced the idea that the division of labor led to the great prosperity of Britain
- defined the wealth of a nation as the sum of the goods produced by its people



Adam Smith studied to become a philosopher. Yet today he is best known for his support of a free market economy.

Division of Labor

Adam Smith did not set out to become an economist. In fact, he focused on philosophy when, at age 14, he earned a scholarship to attend Glasgow University. Travels throughout Europe and talks with notable thinkers helped Smith turn his attention to economics. In 1776 he published his most influential book, *An Inquiry into the Nature and Causes of the Wealth of Nations,* in which he observed that labor becomes more productive as each worker becomes more skilled at a single job. This made him the first to introduce and recognize the importance of the "division of labor."

Invisible Hand

Smith's most important contribution was the notion that competition and individual self-interest would somehow act as an "invisible hand" to guide resources to their most productive uses. He suggested that the role of government should be limited to enforcing contracts, granting patents and copyrights to encourage inventions and new ideas, and providing public works, such as roads and bridges.

Wealth of Nations

Smith also put forth the new idea that the "wealth of nations" should be defined as the sum of the goods produced by labor, not the personal financial wealth of those who owned them. Competition in markets, along with the division of labor and the invisible hand, would lead to increased productivity and output. Smith's doctrine of laissez-faire (French for "let it be") marked the beginning of modern economic thought, and it still serves as the basis of our free market economy.

Examining the Profile

1. **Summarizing Ideas** What ideas did Adam Smith contribute to economic thought?
2. **Synthesizing** Explain how Smith's ideas are evident in the workings of the American economy.

SECTION 3

Economic Choices and Decision Making

GUIDE TO READING

Section Preview

In this section, you will learn that you face trade-offs and opportunity costs whenever you make an economic decision.

Content Vocabulary

- trade-off *(p. 20)*
- opportunity cost *(p. 20)*
- production possibilities frontier *(p. 21)*
- economic model *(p. 23)*
- cost-benefit analysis *(p. 24)*
- free enterprise economy *(p. 24)*
- standard of living *(p. 24)*

Academic Vocabulary

- alternative *(p. 20)*
- assumption *(p. 23)*

Reading Strategy

Identifying As you read this section, complete a graphic organizer similar to the one below by identifying the ways in which you can make economic choices and what these strategies allow you to learn.

Interactive Graphic Organizer

Problems	Strategy	Purpose
Trade-offs	Decision-making grid	

PEOPLE IN THE NEWS

—BusinessWeek

The Grease Pits of Academia

Students at Belmont Abbey College may have a head start in the race for post-graduation jobs—at least jobs that go *VROOM!* Starting this fall, the 1,000-student school outside Charlotte, N.C., will offer the nation's first four-year bachelor's degree in Motorsports Management. Students will study such topics as sports marketing and racing management.

"The program will be NASCAR-focused but will have a broad application to all portions of the motor sports industry," says Philip Bayster, head of the school's business department. Charlotte, the NASCAR epicenter, is home to about 250 racing teams and 25 specialized media and marketing firms.

Pay is anything but the pits. Annual salaries for the region's 14,000 motor sports jobs, not including drivers, average $72,000. ■

What will you do after graduating from high school? Get a job? Go to college? If you choose to work, you will benefit by receiving a paycheck right away. If you decide to earn a college degree—like the NASCAR-focused degree at Belmont Abbey College—you may give up four years of earning potential. The benefit, however, is that your income after college will be greater than the income you will earn with just a high school diploma.

Because resources are scarce, everyone has to make choices. To become a good decision maker, you need to know how to identify the problem and then analyze your alternatives. Finally, you have to make your choice in a way that carefully considers the costs and benefits of each possibility.

trade-off alternative that is available whenever a choice is to be made

opportunity cost cost of the next-best alternative use of money, time, or resources when making a choice

Trade-Offs and Opportunity Cost

MAIN Idea Economic choices involve trade-offs and the careful evaluation of opportunity costs.

Economics & You When you go shopping, you usually have to make choices, because you cannot afford to buy everything you want. Read on to learn about the terms economists apply to these decisions.

There are alternatives and costs to everything we do. In a world where "there is no such thing as a free lunch," it pays to examine these concepts closely.

Trade-Offs

Every decision we make has its **trade-offs,** or alternative choices. One way to help us make decisions is to construct models such as the grid in **Figure 1.5.** This grid shows how Jesse decides to spend a $100 gift.

Jesse likes several **alternatives:** a video game, concert tickets, an MP3 player, and a replica NFL jersey. At the same time, he realizes that each item has advantages and disadvantages. Some of the items can be used more than once, and some might require his parents' consent. Some even have additional costs such as batteries.

To help with his decision, Jesse can draw a grid that lists his alternatives and several criteria by which to judge them. Then he evaluates each alternative with a "yes" or "no." In the end, Jesse chooses the jersey because it satisfies more of his criteria than any other alternative.

Using a decision-making grid is one way to analyze an economic problem. It forces you to consider a number of alternatives and the criteria you'll use to evaluate the alternatives. Finally, it makes you evaluate each alternative based on the criteria you selected.

Opportunity Cost

People often think of cost in terms of dollars and cents. To an economist, however, cost means more than the price tag on a good or service. Instead, economists think broadly in terms of **opportunity cost,** the cost of the next-best alternative. When Jesse decided to purchase the jersey, his opportunity cost was the MP3 player—the next-best choice he gave up. In contrast, trade-offs are all of the other alternatives that he could have chosen.

Even time has an opportunity cost, although you cannot always put a monetary value on it. The opportunity cost of reading this economics book, for example, the history paper or math homework that you could not do at the same time.

Reading Check **Summarizing** How are trade-offs and opportunity cost related?

Figure 1.5 ▶ Jesse's Decision-Making Grid

Alternatives	Criteria				
	Costs $100 or less?	Durable?	Will parents approve?	Future expense unnecessary?	Can use anytime?
Video game	yes	yes	no	yes	no
Concert tickets	yes	no	yes	no	no
MP3 player	yes	yes	yes	no	yes
NFL jersey	yes	yes	yes	yes	yes

▶ A decision-making grid lists alternatives and criteria to help evaluate choices.

Economic Analysis ***What do economists mean when they talk about costs?***

Production Possibilities

MAIN Idea Economies face trade-offs when deciding what goods and services to produce.

Economics & You You just learned that you face trade-offs and opportunity costs when making choices. Read on to learn how opportunity cost applies to countries as well as individuals.

To illustrate opportunity cost, economists use the **production possibilities frontier,** a diagram representing various combinations of goods and services an economy can produce when all its resources are in use. In the example in **Figure 1.6,** a mythical country called Alpha produces two goods—cars and clothing.

Identifying Possible Alternatives

Even though Alpha produces only two goods, the country has a number of alternatives available to it. For example, it could choose to use all of its resources to produce 70 units of cars and 300 units of clothing, which is shown as point **a** in Figure 1.6. Or it could shift some of its resources out of car production and into clothing, thereby moving to point **b.** Alpha could even choose to produce at point **c,** which represents all clothing and no cars, or at point **e,** which is inside the frontier.

Alpha has many alternatives available to it, which is why the figure is called a production "possibilities" frontier. Eventually, though, Alpha will have to settle on a single combination such as point **a, b,** or any other point on or inside the curve, because its resources are limited.

Fully Employed Resources

All points on the curve such as **a, b,** and **c** represent *maximum* combinations of output that are possible if all resources are fully employed. To illustrate, suppose that Alpha is producing at point **a,** and the people would like to move to point **d,** which represents the same amount of cars, but more clothing. As long as all resources are fully employed at point **a,** there are no extra resources available to produce the extra clothing. Therefore, point **d** cannot be reached, nor can any other point outside the curve. This is why the figure is called a production possibilities "frontier"—to indicate the maximum combinations of goods and services that can be produced.

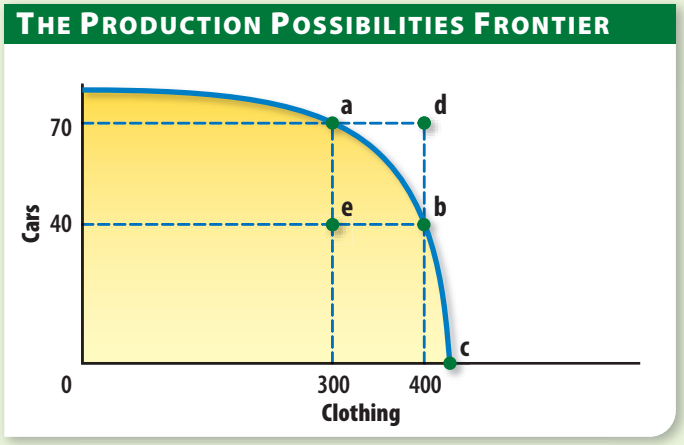
production possibilities frontier diagram representing the maximum combinations of goods and/or services an economy can produce when all productive resources are fully employed

The Cost of Idle Resources

If some resources were not fully employed, then it would be impossible for Alpha to reach its maximum potential production. Suppose that Alpha was producing at point **b** when workers in the clothing industry went on strike. Clothing production would fall, causing total output to change to point **e.** The opportunity cost of the unemployed resources would be the 100 units of lost clothing production.

Production at point **e** could also be the result of other idle resources, such as factories or land that are available but not being used. As long as some resources are idle, the country cannot produce on its frontier—which is another way of saying that it cannot reach its full production potential.

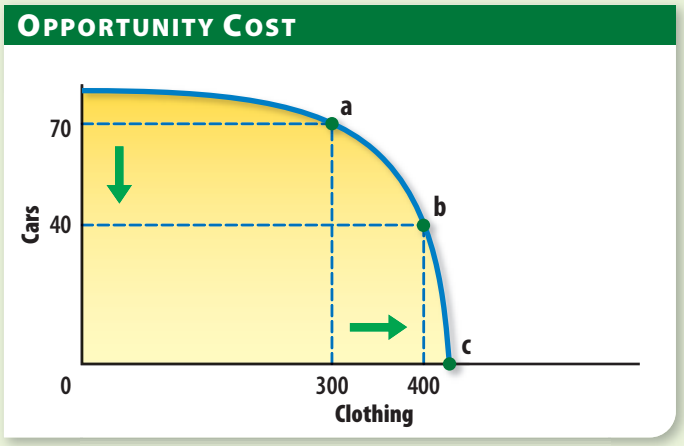
Figure 1.6 ▶ **Production Possibilities Frontier**



▶ The production possibilities frontier shows the different combinations of two products that can be produced if all resources are fully employed.

Economic Analysis ***Why can production take place on or inside the frontier?***

Figure 1.7 ▶ Opportunity Cost



▶ When the production for one item increases, the production of other items decreases. In the example shown, the opportunity cost for producing and additional 10 units of clothing is the 30 cars given up.

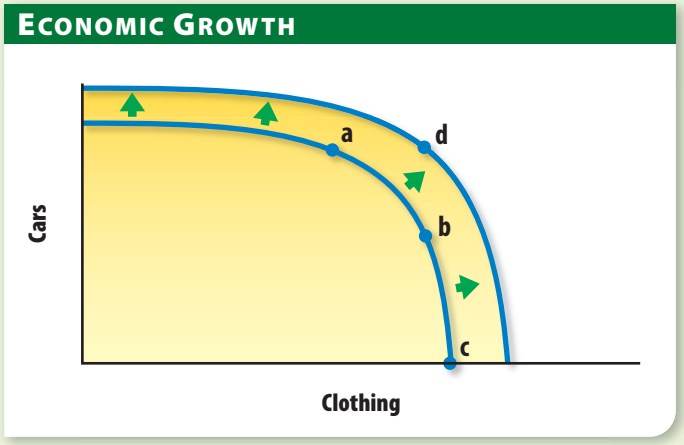
Economic Analysis ***If Alpha decided to produce units of clothing at point c, what would be the opportunity cost in cars?***

Opportunity Cost

Suppose that Alpha was producing at point **a** and that it wanted to move to point **b.** This is clearly possible as long as point **b** is not outside the production possibilities frontier. However, Alpha will have to give something up in return. As shown in **Figure 1.7,** the opportunity cost of producing the 100 additional units of clothing is the 30 units of cars given up.

As you can see, opportunity cost applies to almost all activities, and it is not always measured in terms of dollars and cents. For example, you need to balance the time you spend doing homework and the time you spend with your friends. If you decide to spend extra hours on your homework, the opportunity cost of this action is the time that you cannot spend with your friends. You normally have a number of trade-offs available whenever you make a decision, and the opportunity cost of the choice you make is the value of the next best alternative that you give up.

Figure 1.8 ▶ Economic Growth



▶ The only way to expand the production possibilities frontier is to attain economic growth.

Economic Analysis ***What factors make it possible for the economy to grow?***

Economic Growth

The production possibilities frontier represents potential output at a given point in time. Eventually, however, changes may cause the production possibilities frontier to expand. The population may grow, the stock of capital may expand, technology may improve, or productivity may increase. If any of these changes occur, then Alpha will be able to produce more in the future.

The effect of economic growth is shown in **Figure 1.8.** Economic growth, made possible by having more resources or increased productivity, causes the production possibilities frontier to move outward. Economic growth will eventually allow Alpha to produce at point **d,** which it could not do earlier.

✓Reading Check **Synthesizing** How can the production possibilities frontier be used to illustrate economic growth?

Thinking Like an Economist

MAIN Idea Economists use a strategy called cost-benefit analysis to evaluate choices.

Economics & You When you work a complicated math problem, do you ever look at a simplified example to better understand the process? Read on to learn how economists use models to understand complex economic activities.

Because economists study how people satisfy seemingly unlimited and competing wants through the careful use of scarce resources, they are concerned with strategies that will help people make the best choices. Two strategies are building models and preparing a cost-benefit analysis.

Build Simple Models

One of the most important strategies is to build economic models. An **economic model** is a simplified equation, graph, or figure showing how something works. Simple models can often reduce complex situations to their most basic elements. To illustrate, the production possibility frontiers in this section and the circular flow diagram in Figure 1.3 on page 15 are examples of how complex economic activity can be explained by a simple model.

Another basic model is the production possibilities frontier that is illustrated in Figure 1.6 on page 21. Realistically, of course, economies are able to produce more than two goods or services, but the concepts of trade-offs and opportunity costs are easier to illustrate if only two products are examined. As a result, simple models such as these are sometimes all that economists need to analyze or describe an actual situation.

It is important to realize that models are based on **assumptions,** or things we think are true. In general, the quality of a model is no better than the assumptions on which it is based, but a model with simple assumptions is usually easier to understand. In the case of the production possibilities frontier, for example, we assumed that only two goods could be produced. This made the model easier to illustrate and still allowed us to discuss the concepts of trade-offs and opportunity costs.

It is also important to keep in mind that models can be revised to make them better. If an economic model helps us to make a prediction that turns out to be right, the model can be used again. If the prediction is wrong, the model might be changed to make better predictions the next time.

economic model simplified version of a complex concept or behavior expressed in the form of an equation, graph, or illustration

CAREERS

Economist

The Work

* Collect and analyze data, observe economic trends
* Advise businesses and other organizations on such topics as energy costs, inflation, imports, and employment levels
* Study economic conditions in the United States or in other countries to estimate the economic effects of new legislation or public policies

Qualifications

* Strong computer and quantitative skills
* Ability to conduct complex research, write reports, and prepare statistical data
* Bachelor's degree, with a focus on economics and statistics, accounting, or calculus
* Master's degree required for most economists in the private sector

Earnings

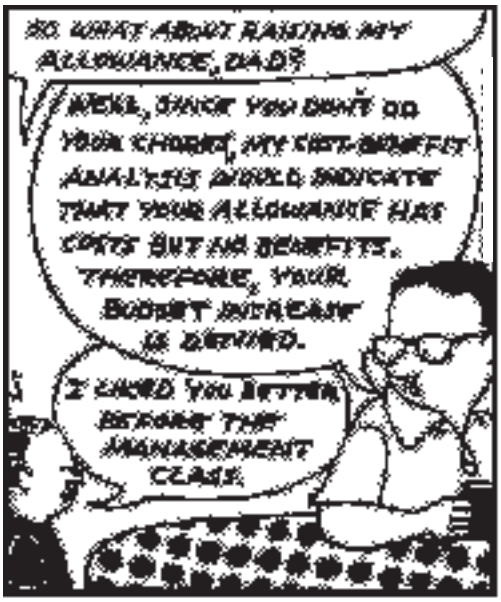
* Median annual earnings: $72,780

Job Growth Outlook

* Slower than average

Source: *Occupational Outlook Handbook*, 2006–2007 Edition

Cost-Benefit Analysis Before making any major financial decisions, it is a good idea to weigh the benefits against the costs. ***How might a business use cost-benefit analysis?***



cost-benefit analysis way of thinking about a choice that compares the cost of an action to its benefits

free enterprise economy market economy in which privately owned businesses have the freedom to operate for a profit with limited government intervention

standard of living quality of life based on ownership of necessities and luxuries that make life easier

Apply Cost-Benefit Analysis

Most economic decisions can be evaluated with **cost-benefit analysis,** a way of comparing the costs of an action to the benefits received. This is what Jesse did when he devised a decision-making grid. This decision can be made subjectively, as when Jesse selected the jersey, or it can be made more objectively, especially if the costs of the various alternatives are different.

To illustrate, suppose that you have to make a decision, and you like choices A and B equally. If B costs less, it would be the better choice because you would get more satisfaction per dollar spent. Businesses make investment decisions in exactly this manner, choosing to invest in projects that give the highest return per dollar spent or, in other words, the best cost-benefit ratio.

Take Small, Incremental Steps

Finally, it also helps to take small, incremental steps toward the final goal. This is especially valuable when we are unsure of the exact cost involved. If the cost turns out to be larger than we anticipated, then the resulting decision can be reversed without too much being lost.

Reading Check **Explaining** How does cost-benefit analysis help make economic decisions?

The Road Ahead

MAIN Idea The study of economics helps people become better citizens.

Economics & You As you become old enough to vote, are you also becoming more aware of current events? Read on to learn how economic issues affect politics.

The study of economics does more than explain how people deal with scarcity. Economics also includes the study of how things are made, bought, sold, and used. It provides insight as to how incomes are earned and spent, how jobs are created, and how the economy works on a daily basis. The study of economics also gives us a better understanding of the workings of a **free enterprise economy**—one in which consumers and privately owned businesses, rather than the government, make the majority of the WHAT, HOW, and FOR WHOM decisions.

Topics and Issues

The study of economics will provide you with a working knowledge of the economic incentives, laws of supply and demand, price system, economic institutions, and property rights that make the U.S. economy function. Along the way, you will learn about topics such as unemployment, the business cycle, inflation, and economic growth. You will also examine the role of business, labor, and government in the U.S. economy, as well as the relationship of the United States economy with the international community.

All of these topics have a bearing on our **standard of living**—the quality of life based on the ownership of the necessities and luxuries that make life easier. As you study economics, you will learn how to measure the value of our production and how productivity helps determine our standard of living. You will find, however, that the way the American people make economic decisions is not the only way to make these decisions.

Economists have identified three basic kinds of economic systems. We will analyze these systems and how their organization affects decision making in the next chapter.

Economics for Citizenship

The study of economics helps us become better decision makers—in our personal lives as well as in the voting booths. Economic issues are often debated during political campaigns, so we need to understand the issues before deciding which candidate to support.

Most of today's political problems have important economic aspects. For example, is it important to balance the federal budget? How can we best keep inflation in check? What methods can we use to strengthen our economy? The study of economics will not provide you with clear-cut answers to all of these questions, but it will give you a better understanding of the issues involved.

Understanding the World Around Us

The study of economics helps us understand the complex world around us. This is particularly useful because the world is not as orderly as your economics textbook, for example. Your book is neatly divided into sections for study. In contrast, society is dynamic, and technology and other innovations always lead to changes.

Economics provides a framework for analysis—a structure that helps explain how things are organized. Because this framework describes the incentives that influence behavior, it helps us understand why and how the world changes.

In practice, the world of economics is complex and the road ahead is bumpy. As we study economics, however, we will gain a much better appreciation of how we affect the world and how it affects us.

Reading Check **Determining Cause and Effect**
How do you think our society would be different if citizens did not study economics?

Economics ONLINE

Student Web Activity Visit the *Economics: Principles and Practices* Web site at glencoe.com and click on *Chapter 1—Student Web Activities* to learn more about how economics affects our lives.

SECTION 3

Review

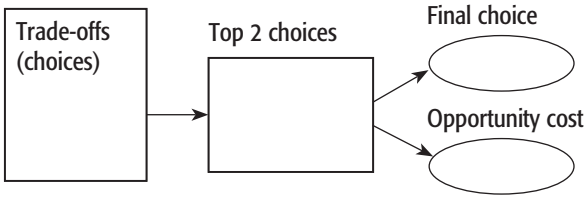
Vocabulary

1. **Explain** the significance of trade-off, opportunity cost, production possibilities frontier, economic model, cost-benefit analysis, free enterprise economy, and standard of living.

Main Ideas

2. **Illustrating** Imagine you have $50 to spend. What one item would you buy? Complete the graphic organizer below to illustrate your final choice, the opportunity cost of your choice, and the trade-offs.

Interactive Graphic Organizer



3. **Explaining** What decision-making strategies do economists recommend using?

Critical Thinking

4. **The BIG Idea** Why is it important for governments to understand trade-offs and opportunity costs? Explain in a brief paragraph.

5. **Synthesizing** How does economics play a part in politics?

6. **Analyzing Visuals** Study the production possibilities frontier in Figure 1.6 on page 21. What does it mean when the frontier shifts outward? What possible causes exist for such a shift?

Applying Economics

7. **Economic Way of Thinking** Search the newspaper and identify a major economic issue facing your community or state. Identify possible solutions and prepare a decision-making grid to evaluate the alternatives. What decision would you make? Write a short essay in which you explain your choice.

CASE STUDY

Gap, Inc.

Search for the Perfect Jeans

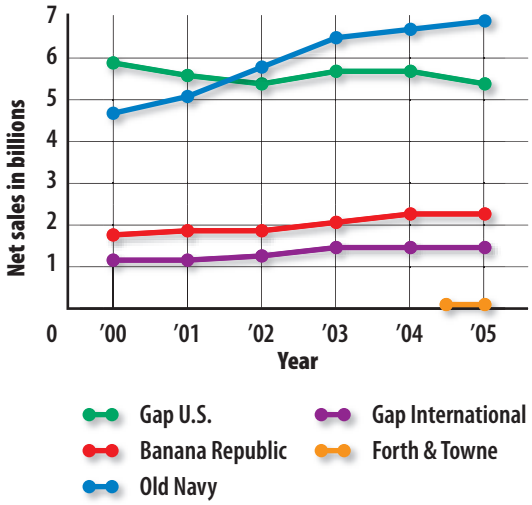
We all have them. And if you don't, you are probably looking for them—the perfect pair of jeans. Preferably, they are faded, soft, and perfect. In 1969, Don and Doris Fisher opened the first Gap store in San Francisco "to make it easier to find" that perfect pair. This store was only the beginning. Gap, Inc., expanded its consumer market through Banana Republic, Old Navy, and, most recently, Forth and Towne.

Something for Every "Body"

Why did a single retail shop morph into four different brands? In the 1990s, Gap seemed to be losing its edge. A boastful rival claimed to Gap's then-CEO Mickey Drexler that "he could create a cheap Gap knockoff that one day would be bigger than Gap itself." Drexler liked the idea and ran with it himself. Enter Old Navy.

Just as each body requires a different pair of jeans—be it boot cut or low rise—each Gap, Inc., brand has a unique identity that is carried out in the store environment and marketing agenda. For example, budget-conscious consumers can peruse the deals at Old Navy while standing on concrete floors and listening to loud music. Down the street at Banana Republic, a more sophisticated crowd is checking out the season's trendiest fashions at "approachable prices." Meanwhile, at Forth and Towne, the target is the female baby boomer. These 35-and-over women are treated to chandeliers and lavish fitting rooms stocked with bottled water and chocolates.

GAP REVENUES



Source: www.gapinc.com

Retail Success

The economics and marketing savvy behind the retailer's rise to success are pretty simple: provide a product of value at different price levels in order to reach the maximum number of consumers. It seems to be working. With more than 3,000 stores and 2005 revenues topping out at $16 billion, Gap, Inc. operates under the notion that every "body" deserves that perfect pair of jeans.

Analyzing the Impact

1. **Summarizing** How did Gap, Inc., tackle the economic problem of consumers having to make choices?
2. **Analyzing** Investigate each brand's Web site. How does each site's design reflect the brand's target audience?

CHAPTER 1

Visual Summary

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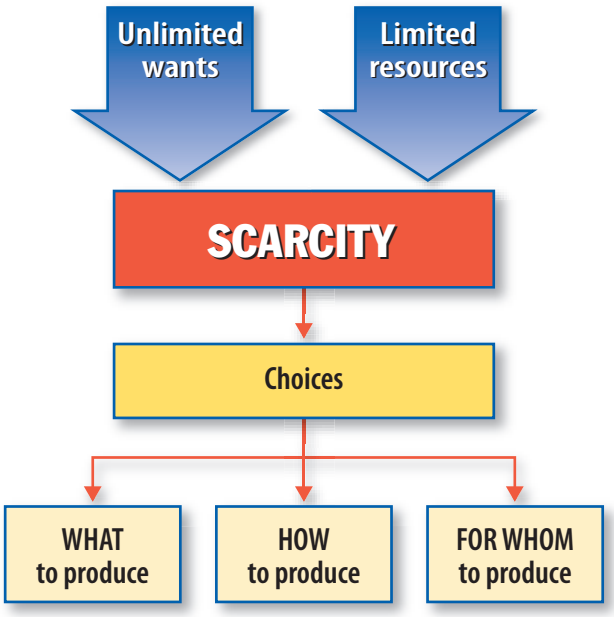
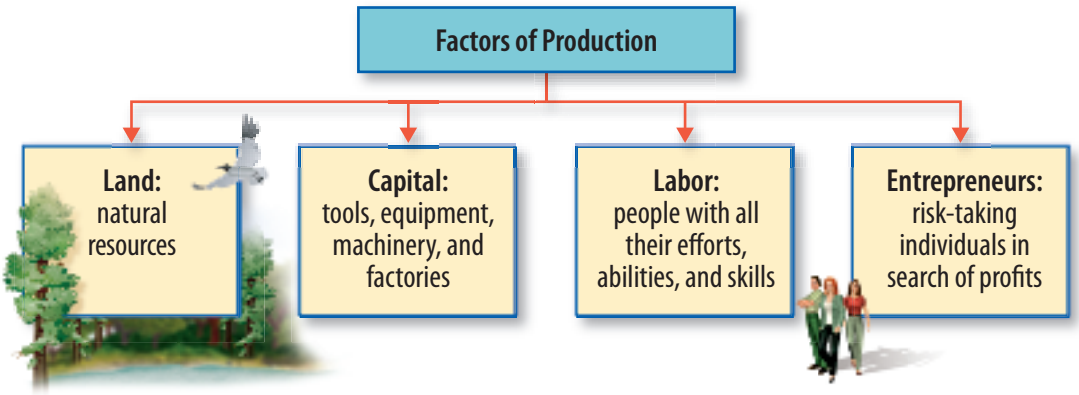
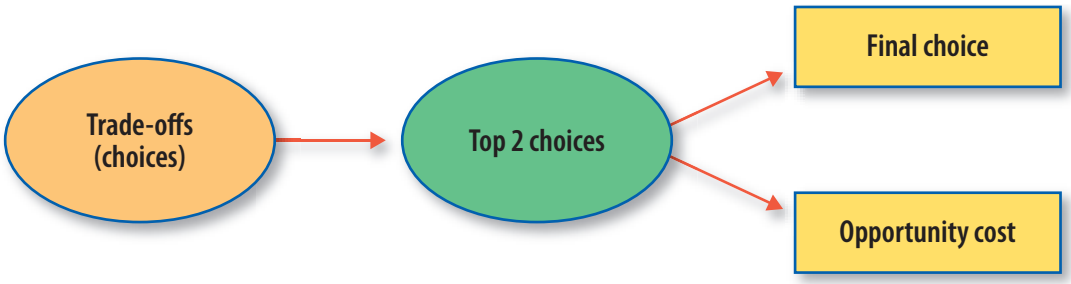
Scarcity Because of scarcity, society needs to decide how to distribute limited resources to satisfy seemingly unlimited wants and needs.



Factors of Production Four factors of production are required to produce the things we would like to have.



Trade-offs and Opportunity Costs All economic decisions require us to make choices among alternatives. Trade-offs are all the available alternatives. The opportunity cost is the next-best alternative we give up.



CHAPTER 1

Assessment & Activities

Review Content Vocabulary

Use the key terms from the list below to complete the sentences that follow.

a. capital goods
b. consumer goods
c. economics
d. factors of production
e. human capital
f. opportunity cost
g. scarcity
h. services
i. utility
j. value

1. Economic products designed for final use by people are called _____ .
2. The _____ of a CD player can be expressed in dollars and cents.
3. Haircuts and appliance repairs are examples of _____ .
4. _____ arises because society does not have enough resources to produce all the things people would like to have.
5. The _____ of going to a football game instead of working would include the money not earned at your job.
6. _____ is the sum of the skills, abilities, health, and motivation of people.
7. _____ is another name for the capacity of a product to be useful.
8. The only factors of production that are themselves the result of earlier production are _____ .
9. Land, capital, labor, and entrepreneurs are _____ .
10. _____ is the study of how people use limited resources to satisfy unlimited wants.

Review Academic Vocabulary

On a separate sheet of paper, use each of these terms in a sentence that reflects the term's meaning in the chapter.

11. resource
12. comprehensive
13. transferable
14. accumulation
15. mechanism
16. alternative
17. assumption

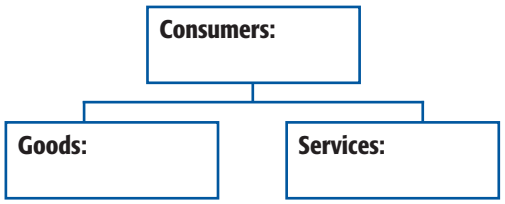
Review the Main Ideas

Section 1 *(pages 5–10)*

18. **Identify** the cause and effects of scarcity.
19. **Explain** how the factors of production relate to one another.
20. **Describe** the key elements of studying economics.

Section 2 *(pages 12–17)*

21. **Define** *goods, services,* and *consumers* and describe the relationship among the three, using a graphic organizer similar to the one below.



22. **Describe** the paradox of value.
23. **Explain** how the circular flow of economic activity generates wealth in an economy.
24. **Identify** two ways to increase productivity.

Section 3 *(pages 19–25)*

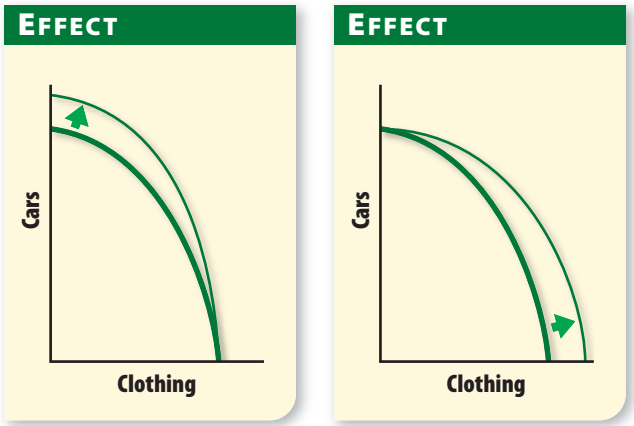
25. **Describe** how economists view the term *cost.*
26. **Identify** the economic concept illustrated by the production possibilities frontier.
27. **Describe** how economic models help economists develop strategies that help people make economic choices.
28. **Explain** why economic education is important.

Critical Thinking

29. **The BIG Idea** You have learned that scarcity is the fundamental economic problem for societies. Write a short paragraph explaining how scarcity affects you and your family on a daily basis.

Economics ONLINE **Self-Check Quiz** Visit the *Economics: Principles and Practices* Web site at glencoe.com and click on *Chapter 1—Self-Check Quizzes* to prepare for the chapter test.

30. Determining Cause and Effect Copy the two diagrams of the production possibilities frontiers shown below. Then write captions that explain what each diagram is showing.



31. Understanding Cost-Benefit Analysis How would you apply the concept of cost-benefit analysis to the decision whether to finish high school? To further your education beyond high school? To purchase a computer? Explain your results in a few sentences.

32. Evaluating Alternatives Refer to the chapter opener activity on page 4 and evaluate the alternatives in *one* of the three categories (location, music, refreshments). What criteria will you use? What are the trade-offs? On a separate sheet of paper, illustrate your decision in a decision-making grid similar to the one below.

Alternatives	Criterion 1	Criterion 2	Criterion 3	Criterion 4

Writing About Economics

33. Persuasive Writing Research a recent school funding levy for your school district that was not approved. Find out what changes the school district had to implement to adjust to the reduced funding levels and reduced resources available to schools. Write a two-page paper in which you evaluate the choices.

Math Practice

34. A city administrator with a $100,000 annual budget is trying to decide between fixing potholes or directing traffic after school at several busy intersections. Studies have shown that 15 cars hit potholes every week, causing an average of $200 in damages. Collisions at the intersections are less frequent, averaging one per month at an average cost of $6,000, although none have caused injuries or deaths. Use this information to answer the following questions.

a. What are the annual costs from the pothole damage?

b. What are the annual costs due to damage from collisions?

c. Given the size of the annual budget, make your recommendation as to which project should be undertaken. Explain your answer in terms of dollar benefits per dollar spent.

Thinking Like an Economist

35. Use a problem-solving process to gather information about the alternatives, trade-offs, and opportunity costs facing the city administrator in the previous question. Consider the advantages and disadvantages of implementing the possible solutions. Prepare a written summary.

Interpreting Cartoons

36. Critical Thinking Look at the cartoon below. How does the message of this cartoon relate to the concepts presented in this chapter?

DEBATES IN ECONOMICS

Should the Minimum Wage Be Increased?

The minimum wage was created in 1938 by the Fair Labor Standards Act (FLSA), debuting at 25 cents per hour. Even though it has been raised many times since then, it remains the subject of debate. Unions and antipoverty organizations typically spearhead campaigns to increase the minimum wage, saying it will help the nation's working poor without affecting employment. Business organizations typically oppose a hike in the minimum wage, arguing that it will increase unemployment.

Who is right? As you read the selections, ask yourself: Should the minimum wage be increased?

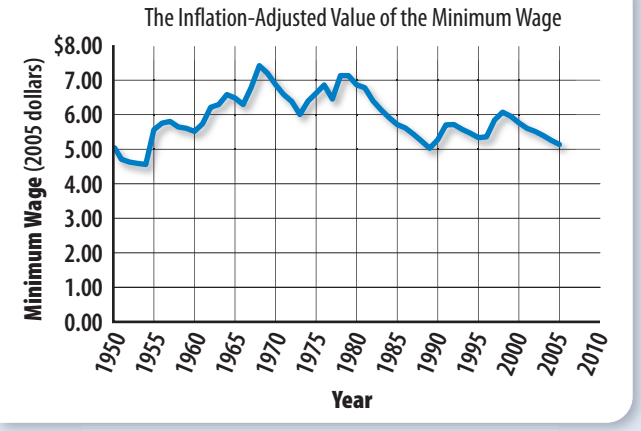
PRO A MORAL MINIMUM WAGE

. . . 1968 [was] the last year that the minimum wage was above the nation's poverty line. . . . If the minimum wage were pegged at $9.50, millions . . . would be lifted out of poverty. The largest group of beneficiaries would be children, whose parents would have more money for rent, food, clothing and other basic necessities.

Business leaders still trot out economists to claim that raising the minimum wage will destroy jobs and hurt small businesses. But the evidence, based on studies of the effects of past increases in both the federal and state minimum-wage levels, . . . shows otherwise. Because the working poor spend everything they earn, every penny of a minimum-wage increase goes back into the economy, increasing consumer demand and adding at least as many jobs as are lost. Most employers actually gain, absorbing the increase through decreased absenteeism, lower recruiting and training costs, higher productivity and increased worker morale.

–Peter Dreier, director of the Urban & Environmental Policy program at Occidental College; and Kelly Candaele, founding member of the Peace Institute at California State University, Chico

MINIMUM WAGE PURCHASING POWER LOW BY HISTORICAL STANDARDS



Source: Author's calculations based on the U.S. Department of Labor.

Peter Hvizdak/The Image Works

CON WAGE HIKE WOULD COST JOBS

Raising the federal minimum wage by $1.50 an hour will reduce job opportunities for those who need it most, new entrants to the job market with the least skills or experience. Raising the minimum wage hurts all American consumers and workers, by artificially inflating the cost of entry-level jobs, which is passed on through higher prices and lower real wages.

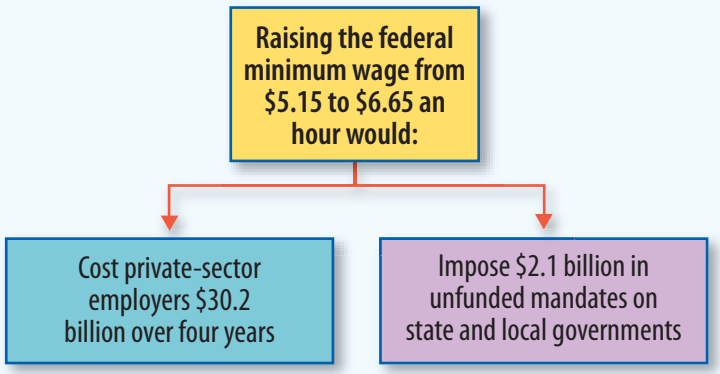
The convenience store industry offers a compelling employment opportunity, with competitive wages, flexible schedules, and career development. Most convenience stores offer wages far above the minimum–in 2001, the average was $9.28 an hour. However, our industry strongly opposes an increase in the federal minimum wage because it will discourage the creation of entry-level jobs and hurt small businesses. With higher costs of health care and other benefits, and lower profit margins, convenience store owners and petroleum marketers cannot sustain an increase in the minimum wage.

NACS members want to do what's best for their own employees without government interference. And NACS members are very concerned about the inevitable result of a higher minimum wage–a 'ripple effect' of higher prices throughout the economy.

If Congress really wants to help low-income workers, there are much more constructive things that can be done, such as reducing payroll taxes, cutting the capital gains tax, and eliminating unnecessary and burdensome regulations.

–Allison Shulman, director, National Association of Convenience Stores, government affairs

Peter Hvizdak/The Image Works



Source: Congressional Budget Office

Analyzing the Issue

1. **Identifying** What arguments do Dreier and Candaele make in support of increasing the minimum wage?
2. **Explaining** Why does Shulman believe that raising the minimum wage will hurt convenience stores and other small businesses?
3. **Deciding** With which opinion do you agree? Explain your reasoning.