



What Is Economics?

You're gearing up for a weekend trip to the boardwalk with your friends. You take out your in-line skates from the back of your closet. Just by looking at the scratches and dust on them you suppose they need a wheel rotation. Unfortunately, you don't have the parts to do it. You also don't know how to switch the wheels yourself, and you don't have enough money to get it done. You have a shortage of resources. Just as individuals have to deal with a shortage of resources, so do societies.

Factors of Production

A society might not have enough oil, doctors, or technology to satisfy the wants and needs of its people. This shortage of resources is called **scarcity**. A basic economic problem for any society is how to manage its resources. Figure 2.1 illustrates how your choices between wants and needs influence your economic situation. You can identify **factors of production** as being all of the components necessary to produce a society's goods and services, such as the wheat that grows in the ground, the tractor that harvests it, and the labor that turns it into flour. You can differentiate four types of economic resources.

**Figure
2.1**

YOUR ECONOMIC REALITY AT A GLANCE

➡The average American spends \$7 a day on food. People spend less than half of that money on home-cooked meals. On a separate piece of paper, re-create this table below. Insert a check mark in the appropriate square based upon your eating experiences in one week.

How do your choices influence your economic situation?

Choice	Fast-food restaurant	Home-cooked meal	Eat at a friend's house
Sunday			
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			

Natural Resources

The raw materials found in nature are called **natural resources**. Natural resources become factors of production when used to produce goods. The trees used to make paper and the fish harvested for food are factors of production. Natural resources are often basic elements that can be combined in various ways to create goods. Even synthetic or artificially produced materials are made by combining or changing natural resources. For example, nylon is a synthetic material derived from coal, water, and air.

The economy of many countries is based on its natural resources. For example, the economy of Saudi Arabia depends on its oil production. Many Latin American countries rely on their coffee crops. Other countries, such as Japan, have few natural resources and must get them from somewhere else.

Some resources, like wheat and cattle, are *renewable*. They can be reproduced. Other resources are limited, or *nonrenewable*, like coal, iron, and oil. The amount of natural resources available to a society has a direct effect on its economy.

Human Resources

To produce goods and provide services requires the work of many people. The knowledge, efforts, and skills people bring to their work are called **human resources**, or labor. Teachers, coal miners, bank managers, and farmworkers are all human resources. Whether you're a cashier or a news anchor, you're a human resource. Human resources are needed for everything from drilling oil out of the ground to selling gasoline at a service station.

Labor can be skilled or unskilled, physical or intellectual. Workers employed in the same types of jobs often belong to organizations, such as labor unions. Labor unions were created because workers believed that big businesses weren't treating them fairly. Labor unions negotiate with management for better pay, hours, and working conditions in a process called *collective bargaining*. Traditionally, union membership has been strongest in the manufacturing sector, such as in steel, automobiles, and tires.

Capital Resources

Another factor of production is capital resources. Capital resources are not the same as capital, or money. **Capital resources** are the things used to produce goods and services, like buildings, materials, and equipment. They include delivery trucks, supermarkets, cash registers, and medical supplies. A Deere & Company tractor that a farmer uses to

Real-World Application

part 1 of 4



HOW THE HEARTH SAVED YOU MONEY

Homeowners are tired of paying high bills for natural gas and electricity. Midwesterners have turned to Mike Haefner, the founder of American Energy Systems, Inc., in Hutchinson, Minn. His company manufactures a hearth alternative: a corn-burning appliance.

Is corn a renewable or non-renewable resource?

continued on p. 23

harvest wheat is a capital resource. The headquarters of IBM is a capital resource. If you're a writer or an accountant, the computer you use is a capital resource.

Another aspect of capital resources is the factors of distribution used to get a good to market. Some of these factors are a country's roads, rails, ports, airports, and even the climate of an area.

Entrepreneurial Resources

To meet the changing wants and needs of people requires **entrepreneurial resources**. Entrepreneurs recognize the need for new goods and services. They improve on ways to use resources, or create and produce new ones. Henry Ford perfected the factory assembly line method of mass production. Computer industry pioneers William Hewlett and David Packard developed the programmable scientific calculator.

A key to dealing with scarcity is to develop new resources and technologies. For example, researchers at Pioneer Hi-Bred and DuPont are developing and improving insect resistant corn to protect against corn rootworm, which is a costly expense to farmers.



Fast Review

1. What is scarcity?
2. What are the four factors of production?
3. What are some examples of capital resources?

Consider This...

Blood Is Thicker Than Oil

Occidental Petroleum Corp. is exploring for oil in Colombia. However, the U'wa people oppose oil exploration on the land they have lived on for thousands of years. For them, oil is the "blood of Mother Earth." The problem is more complex because the Colombian government supports the oil production, which will bring development to the country.

ANALYZE

Who has the right to the land—the U'wa people, the corporation, or the Colombian government?

Making Decisions About Production

The problem of scarcity forces societies to answer some basic economic questions. No society has enough productive resources available to produce everything people want. Every society must, therefore, make choices.

Basic Economic Questions

Rules and regulations determine choices. You can summarize how economic decisions are made by thinking about the three economic questions society needs to answer: What should be produced? How should it be produced? Who should share in what is produced?

What Should Be Produced? Every country must decide how to use its resources to meet the needs of its people. It has to determine what to produce and how much to produce. The resources used for one purpose can't also be used for something else. For example, a piece of land could be used to grow wheat or corn. It could also be used as the site of a factory, a housing development, or a park. However, the land can only be used for one of these things at a time. Deciding to use it for one purpose means giving up the opportunity to use it for something else.

How Should It Be Produced? When a society decides what to produce, it must also address other types of questions, such as what methods will be used, how many people will work on the production, and what will be the quality of the items produced? The answers to these questions depend on two factors. One factor depends on how goods are to be produced. Another important factor is the quantity of available resources. In a country where there are workers but very little capital resources, it's probable that little equipment and larger amounts of labor are used in producing goods. The opposite would be true in a country with capital resources but relatively few workers.

Who Should Share in What Is Produced? This question focuses on the concept that people can't get everything that they want because the society doesn't have enough resources. Thus, who gets the limited number of goods that are produced? Although the first two basic economic decisions are important, choosing how goods and services are distributed probably interests people most. In most societies, people can have as many goods and services as they can afford to buy. Thus, the amount of income people receive determines how many goods and services they can have. Then the question arises as to how does the society determine the income earned by each individual in that society?



Fast Review

1. When a society chooses to use a resource for one purpose and gives up the opportunity to use it for some other purpose, what cost is involved?
2. What happens to production methods when a country discovers new ways to combine economic resources?
3. In most countries, what determines how many goods and services a person can buy?

Types of Economic Systems

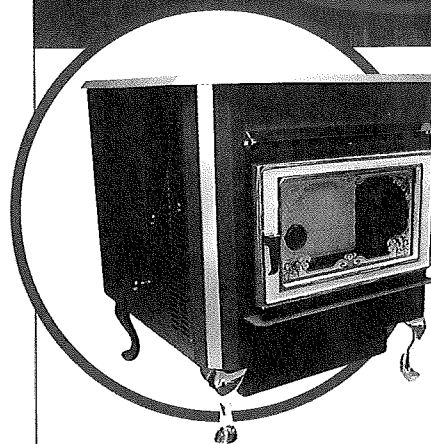
Economics studies how society chooses to use resources to produce and distribute goods and services for people's consumption. Businesses may contribute to an economic system by inventing products that use available resources.

To use its limited resources effectively, every nation needs an economic system. An economic system determines how resources will be used. The primary goal of an economic system is to provide people with a minimum standard of living, or quality of life.

To answer the basic economic questions just discussed, two basic and opposing economic systems have been developed. They are commonly referred to as a market economy and a command economy. When you compare the types of economic systems, you find that there are particular qualities unique to each.

Real-World Application

part 2 of 4



HOW THE HEARTH SAVED YOU MONEY

The Countryside Multi-Fuel Corn/Pellet Stove burns corn (and it doesn't smell like popcorn). Burning corn saves the homeowner ten times more money than electricity or heating oil. Based upon the cost savings, do you think the price of corn is high or low?

continued on p. 25

Market Economy

In a **market economy** economic decisions are made in the marketplace according to the laws of supply and demand. Mobil gas stations, Fantastic Sam's hair salons, Federal Express offices, and the New York Stock Exchange are all marketplaces. The marketplace is anywhere money changes hands.

The Market and Prices. Price plays an important role in the market economy. Price is the amount of money given or asked for when goods and services are bought or sold. If producers think the price consumers will pay for a good or service is too low, and the price does not earn them a profit, they will produce little or none of the product. If they think the price is high enough to earn a profit, they will produce the good and service.

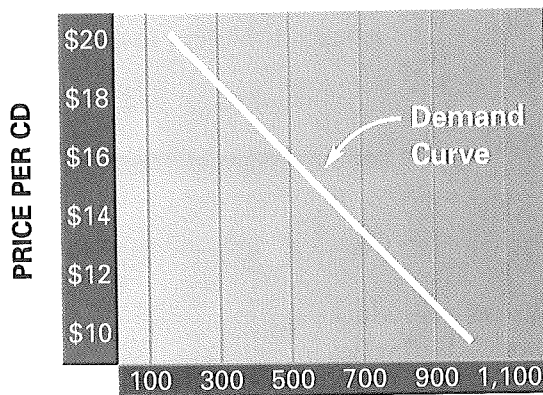
Consumers are the ones who determine the demand of an item. **Demand** is the amount or quantity of goods and services that consumers are willing to buy at various prices. Generally, the higher the price, the

**Figure
2.2**

VISUALIZING DEMAND AND SUPPLY

➡ Perhaps graphing this abstract concept will help you. Remember these two points: (1) The demand curve always falls left to right on a graph, and (2) the supply curve always rises from left to right on the graph.

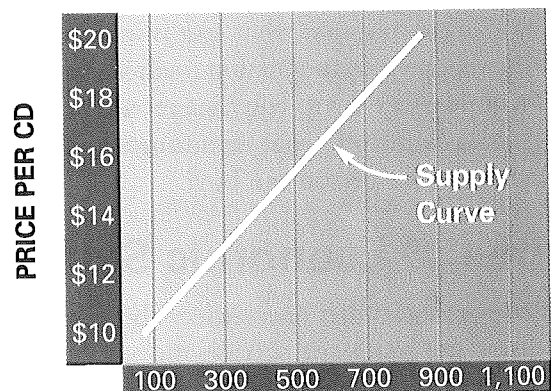
PART 1: DEMAND CURVE FOR CDs



QUANTITY OF CDs DEMANDED
(Millions per Year)

How many CDs will be demanded
at \$16 a piece?

PART 2: SUPPLY CURVE FOR CDs



QUANTITY OF CDs SUPPLIED
(Millions per Year)

How many CDs will be supplied
at \$18 a piece?

fewer consumers will buy an item. The opposite also applies: The lower the price, the more consumers will buy.

Suppose you walk into a store with \$15 to buy a CD. The store is having a “two for one” sale on CDs. You decide to buy two CDs for the price of one. Chances are many other customers will do the same thing. This results in more CDs being sold. The sale encourages consumers to buy more.

Producers are influenced to supply goods or services by the prices in the market. **Supply** is the amount of goods and services that producers will provide at various prices. Producers want to receive a price for their goods and services that will cover their costs and provide a profit.

Suppose the price for eggs rises from \$2 to \$4 a dozen. The price will probably increase because egg-producing businesses will see more profits to be made at \$4. At that price, producers are encouraged to produce more eggs.

Demand and supply work together. Figure 2.2 illustrates demand and supply. When the quantity demanded and the quantity supplied meet, this is called the **equilibrium price**. Equilibrium, then, is the price at which the amount supplied and the amount demanded meet.

The private enterprise system, also called *capitalism*, has some unique characteristics. In this market economy system, resources are privately owned. You can own your own home, your own land, and your own business. You decide how your business will be run, what to sell, and how much to charge. As a consumer, you decide where to live, where to shop, and what to buy. If you need shampoo, you can buy the name brand for dry, unmanageable hair, or the store brand that’s on sale. Government control of the marketplace is minimal. The primary role of government is to support the marketplace by removing obstacles such as trade barriers. The United States and Japan are examples of capitalist countries.

The Market’s Motivations. A market economy also offers incentives, such as competition and the profit motive, to produce more. The *profit motive* is simply the desire to make more money. You have an incentive to work harder and longer if you can make more money. Businesses compete for customers by producing better and cheaper products. The constant demand for new goods and services encourages entrepreneurship.

The problem with a market economy is that owners and producers reap the most rewards. Unskilled workers and older adults are often unable to afford basic needs such as health care. In the United States, for example, the average chief executive officer makes almost 500 times as much as the average blue-collar worker. A small number of large companies can join forces to control the supply of products and manipulate prices. The profit motive can become an end in itself rather than a means to improve the product for all.

Real-World Application

part 3 of 4



HOW THE HEARTH SAVED YOU MONEY

The corn hearth only requires a vent pipe (no chimney) installed through the wall, and it uses as much electricity as a 100-watt light bulb.

Why do you think foreign countries are interested in buying these corn-burning appliances?

continued on p. 27

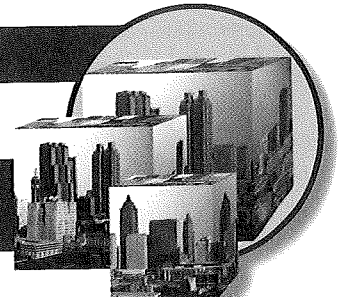
Command Economy

Many nations have a command economy. A command economy is also called a planned or managed economy. In a **command economy** a central authority makes the key economic decisions. This central authority is usually the government, or state.

There are two types of command economies. In a strong command economy, such as *communism*, the state makes all the economic decisions. The state controls all the resources for the common good. The state decides what to produce, how much, and how to distribute it. China, Cuba, and many Latin American and African countries have strong command economies.

Business Building Blocks

Math

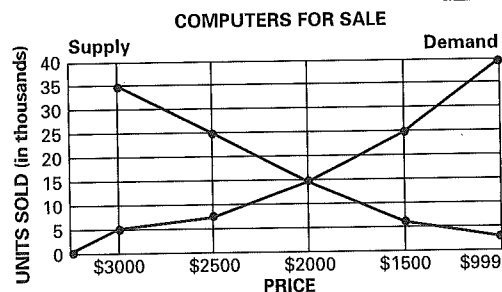


Interpreting Line Graphs

Graphs are a quick and useful way to visually communicate information. You see these from newspaper articles to cereal boxes. Line graphs often show change over a period of time. The left side of a graph is the *vertical axis*. The bottom of the graph is the *horizontal axis*. Both axes display numbers and a label indicating what the numbers represent. Dots on the graph show numerical information. When the dots are connected, they form a line whose location and direction on the graph reveals information about change through time.

Practice

Use the graph to answer the following questions: How many \$3,000 computers are being supplied? What is the difference between supply and demand for \$3,000 computers? At what price does the supply equal the demand for computers?



How to Interpret a Line Graph

- Read the title of the graph.
- Read the label on each axis.
- Understand the numbers on each axis, including the interval used. The *interval* is the unit of measurement between numbers.
- Examine where the dots are located on the graph.
- Determine what the line(s) or curve(s) symbolize.
- Compare the line(s) on the graph to both axes to determine the graph's meaning.

In a moderate command economy, also called *socialism*, there is some form of private enterprise. The state owns major resources, such as airlines and steel, and makes the key economic decisions. However, individuals may own some businesses. France and Sweden are countries that have moderate command economies.

The primary advantage of a command economy is that it guarantees everyone an equal standard of living. The state provides you with a job, a place to live, and health care. Goods and services are distributed evenly. The state also takes care of things like utilities, transportation, and defense. There is usually less crime and poverty because everyone's needs and wants are equally met.

There are some disadvantages to a command economy. In a strong command economy since the state provides all goods and services there is little choice of what to buy. Goods that aren't considered necessities like fashion clothing and VCRs are often unavailable. Prices are fixed by the state, so there is no incentive to produce a better product. Wages are fixed by the state. If you're a highly skilled worker, like a doctor or a lawyer, you often earn the same wage as an unskilled worker. There is no incentive for entrepreneurship when you can't run your own business.

Mixed Economy

A free market economy and a command economy are great ideas in principle but don't always work in practice. In a market economy, there can be great poverty in the midst of great wealth. In a command economy, everyone is economically equal. In reality, few nations have an economy based totally on one model or the other.

Most nations have a **mixed economy**, a combination of a market and command economy. The state takes care of people's needs while the marketplace takes care of people's wants. In the United States, for example, the government provides things like defense and education. The marketplace provides things like cars, computers, and fast food. There is some government regulation of business.

In every country, one type of economy is dominant. However, most countries find a mixed economy is the best way to manage their limited resources.

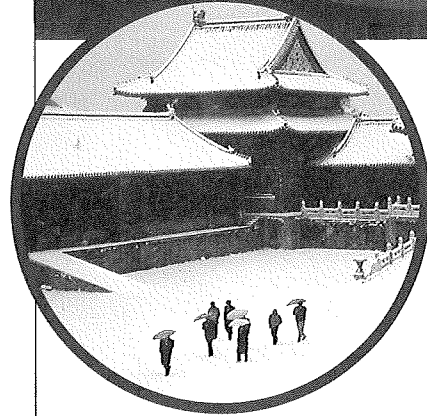


Fast Review

1. Summarize how economic decisions in the market economy are made.
2. Compare the types of economic systems.
3. What are the advantages and disadvantages of a command economy and a market economy?

Real-World Application

part 4 of 4



HOW THE HEARTH SAVED YOU MONEY

The average home using a multi-fuel corn stove will burn 150 to 200 bushels of corn a season. Imagine a command economy that only allows 100 bushels of corn per household. How might this affect the people?



Global Economy

Demand for Oil Americans demand oil for many purposes, but mostly as a fuel for their automobiles. About 193 million vehicles burn 122 billion gallons of gasoline a year. Domestic supplies meet about half of the demand for oil. The map below shows where we get the rest.

Canada supplies
13 percent

Mexico supplies
11 percent

Caribbean Nations
supply 4 percent

(Leading Sources: Virgin Islands, Trinidad and Tobago, Netherlands Antilles)

South America
supplies 24 percent

(Leading Sources: Venezuela, Colombia, Argentina)

On average, a barrel holding 42 gallons of crude oil produces 21 gallons of gasoline.