

Chapter 3

Economic

Understandings

CHAPTER PREVIEW

Terms

needs, wants, goods, services, consumer, producer, scarcity, choices, resource allocation, price, vote, sharing, contests, force, authority, lottery, first-come/first-served, personal characteristic, opportunity cost, trade-off, supply, profit, demand, specialization, trade, exports, imports, tariff, quota, embargo, subsidy, standards, currency, exchange rate, economist, traditional economy, barter, command economy, market economy, mixed economy, economic continuum, Gross Domestic Product (GDP), Consumer Price Index (CPI), inflation, unemployment, factors of production, natural resources, renewable, nonrenewable, capital goods, infrastructure, human capital, entrepreneurship, income, expenses, literacy rate, life expectancy



In a family, everyone seems to have wants: new clothes, a new video game, new shoes, a new cell phone, a new car, going out to eat, a vacation! The list goes on and on. Families also have needs. For instance, you need food for lunch. You need a place to sleep at night. You need clothes to wear to school. These are required to live. However, family members might like to have many things that are not required for living. For instance, you *need* food for lunch but *want* to visit a favorite pizza restaurant.

The concepts of needs and wants are a part of the study of economics. This branch of social studies looks at how people (and countries) manage their resources to meet their needs and wants. A single household has an economy. Cities, states, and countries also have economies. Because modern countries interact with each other through trade, there is also a global economy. Looking at a family as an example will explain how a small economy works. This will help you understand the larger economies worldwide.

“The ultimate purpose of economics, of course, is to understand and promote the enhancement of well-being.”

– Ben Bernanke,
former chair,
Federal Reserve
Bank Board
of Governors



Background:

People have a need for food, but the purchase of a restaurant-made pizza is a want.

SECTION 1

Economic Fundamentals

 AS YOU READ, LOOK FOR...

- » the difference between wants and needs, and goods and services;
- » how people are both consumers and producers;
- » how scarcity forces people to make choices about what they want most;
- » the difference between opportunity costs and trade-offs;
- » terms: **needs, wants, goods, services, consumer, producer, scarcity, choices, resource allocation, price, vote, sharing, contests, force, authority, lottery, first-come/first-served, personal characteristic, opportunity cost, trade-off.**

Needs and Wants

All humans have the same basic **needs**: air to breathe, food to eat, water to drink, and clothing and shelter to protect us. Beyond these basic needs, the things we desire are called **wants**. People's wants—things that would make their lives more comfortable or enjoyable—are almost unlimited. Humans satisfy their needs and wants by acquiring goods and services. **Goods** include *tangible items* (things you can touch) such as food, clothing, houses, and furniture. **Services** are the work or activities people perform, often for a fee. Examples of a service include a doctor's examination, a haircut from a salon or barber shop, or a chef's activities in the restaurant kitchen. The food purchased at the restaurant is a "good," but the chef who makes it provides a "service." Part of the money used to pay a restaurant bill is paying for goods and part is paying for services.

The person who buys the restaurant meal is a **consumer** who satisfies a need or want by buying a good or service. A **producer** is a person or group who uses resources to make goods or provide services. The farmer who grows the food for the meal is an example of a producer.



Scarcity Requires Choices

People have unlimited needs and wants, but there are limits to the resources to meet those needs and wants. Because of these limits, people must decide how to use their resources to satisfy their needs and wants. Some resources may be *abundant* (in large amounts) in each place or society, but all resources are limited. This makes them scarce. **Scarcity** exists when people and societies try to satisfy unlimited wants with limited resources. In other words, scarcity happens when many people want something, but only a limited amount is available. For example, when the newest game system or smartphone is released, it is often scarce because many consumers want to buy it, but a limited supply is available.

Scarcity requires consumers and producers to make **choices** with their limited resources. The limits of a person's or community's resources force them to put limits on the amount of goods and services they obtain. Producers also must make choices about the kinds of goods they produce or the level of services they provide based on available resources. An economic system is created by the choices producers and consumers make with the limited resources they have at their disposal.

Opposite Page: The chef is providing a service by making the pizza, which is a good for purchase by a customer. **Above:** Many people buy their phones from second-hand markets.

Resource Allocation Strategies

Because resources are limited, there must be a way to decide who gets those resources. Different economic systems make these decisions in different ways. Economists identify many ways in which the **resource allocation** decision could be made. These include **price** (goes to the highest bidder, trade, or barter for the resource), **vote** (the majority decides who gets the resource), **sharing** (dividing the resource), **contests** (resource goes to the winner), **force** (the strongest gets the resource), **authority** (directed or ordered by a person in power), **lottery** (resource goes to the luckiest; random), **first-come/first-served** (the first person in line gets the resource), and/or **personal characteristic** (resource goes to person who is oldest, has the longest hair, is most experienced, etc.).

While all nine allocation strategies may be used in all different types of economic systems, in traditional economies, sharing, personal characteristics, lottery, and contests might be used most frequently. In command economies, the decisions about who gets the limited resources are typically made by an authority, through force, or based on first-come/first-served. In market economies, price and vote usually determine who receives limited resources. You will learn more about these economic systems in Section 2.

Opposite Page:
Choices between alternatives often require giving up something to acquire something else.

Figure 3.1 Resource Allocation Strategies





Cost/Benefit Analysis

Individuals, families, businesses, and governments all must make economic choices. The different choices available are called alternatives. Each alternative offers an opportunity with a cost and a benefit. The **opportunity cost** in any decision is the value of the next best alternative a person *does not choose*.

Opportunity costs and benefits affect decisions about using many kinds of resources, including time. For example, a person might have the opportunity to attend a Falcons football game on Sunday. However, the person normally goes to a favorite aunt's house on Sunday for a big family lunch. If the person chooses to go to the football game, this is the opportunity benefit. The opportunity cost is missing out on the family fun and food.

Trade-Offs

When an individual, a business, or a government chooses to have less of one thing to get more of something else, the result is called a **trade-off**. Evaluating trade-offs requires comparing the costs and benefits of each alternative. Choosing between a hamburger and a chicken sandwich at a fast-food restaurant is an either/or decision that does not involve a trade-off.

Not all decisions are either/or decisions. By making small changes, a person can trade off a little more of one thing for a little less of the other. For example, choosing between the family lunch and the Falcons football game could involve a trade-off. The football fan could arrive earlier at the aunt's house, skip dessert, and leave in time to arrive at the game shortly after kickoff. The trade-off would have allowed the person to have some of both opportunities.

REVIEW AND SUMMARIZE

1. What is the difference between needs and wants? Give two examples of each.
2. What is the difference between goods and services? Give two examples of each.
3. Why does scarcity force people to make choices?
4. Which of the nine resource allocation strategies have you seen in your family? Give an example and explain your thinking.
5. What is the difference between opportunity cost and trade-off?

SECTION 2

Trade

Q AS YOU READ, LOOK FOR...

- » why producers sometimes turn out a low supply of their good;
- » factors that affect the demand for a good or service;
- » the role profit plays in production;
- » reasons for specialization and trade;
- » barriers to trade;
- » how people buy goods from other countries by exchanging currency;
- » terms: **supply, profit, demand, specialization, trade, exports, imports, tariff, quota, embargo, subsidy, standards, currency, exchange rate.**

Supply and Demand

Supply is the quantity of a good or service available in the marketplace. Supply can affect both purchasing decisions and prices. Consumers usually want to pay as little as they can for something. Think about how many “bargain” stores there are and how many merchants that have “sales.” In general, when the supply of something is high, its price is low. For example, in Georgia, water is usually in great supply. Many people give away water for free at water fountains and restaurants.

A producer’s goal is to sell goods or services for more than it costs to produce them. The difference between the cost of production and the selling price of a good or service is known as **profit**. Producers have many strategies for increasing their profit including controlling the supply of a good or service in the marketplace.



Demand describes the quantity of a good or service consumers are willing to buy. Demand is based on three things. A consumer must (1) need or want the good or service offered, (2) have the *ability* to pay for it, and (3) be *willing* to pay for it. If those conditions are in place, a consumer will probably still pay attention to the price to avoid paying more than necessary. In general, demand for an item decreases as its price increases. As the price of an item decreases, the demand for the item often increases.

Supply and demand are separate concepts, but when considered together, they help us understand why goods and services have certain prices and why people are willing or unwilling to pay those prices. The price of a good or service results from an ongoing negotiation between producers and consumers based on supply and demand.

The prices of goods and services are important because they help shape economic decisions. If the supply of an item is low but buyers want it badly enough, they will pay a higher price for it. Think about the newest model of a smartphone. People are willing to pay more money to buy the newest model when it is available even though the price may be lower next year. If sellers want to sell large quantities of an item, they are often willing to lower their price to encourage more consumers to make a purchase. Producers are challenged to maximize profit while not setting prices so high that consumers reduce their demand.

Opposite Page: Water is abundant in some areas of the world, but scarce in others. **Below:** Demand for personal technology such as smartwatches increased in the 2020s.





Top: Assembling the leather parts of a shoe is the job of a specialist. **Below:** Different specializations are required before the complete shoe is assembled. **Opposite Page:** A purchase is a trade to exchange money for a needed or wanted item.

Specialization and Trade

Another important economic idea is **specialization** or becoming an expert in one part of a larger business or market. Read the following example of specialization. Mrs. Park works at a shoe factory. In this factory, she runs a machine that sews the leather parts of the shoes together. She has done this job for a long time and is an expert at it. Because she is an expert, she has found ways to improve the machine that she uses. She has also learned skills that help her do her job faster. She knows exactly what to do if there is a problem of any kind. We can say that Mrs. Park is “specialized” in her work. She does not work on gathering, processing, or cutting the leather for the shoes. She does

not work on manufacturing the soles of the shoes. She does not make laces. Other people do those jobs. Mrs. Park does her part of the process very well, and that helps the business run better. Because the people in Mrs. Park’s shoe factory have specialized in their part of the shoemaking process, the entire company works better. The factory has a “division of labor.” The work is divided into different parts, and each worker can become an expert in her or his part. More shoes are made when each specialized worker finds ways to improve the process and learns how to do the job more quickly. The shoe factory is specialized, too. It is not trying to make belts, purses, or other goods. The owners have focused their business on producing more quality shoes in less time for lower cost.

Countries may specialize in producing certain goods just as the people in the shoe factory were specialized. Most countries do not produce all that they consume. Instead, they focus on producing certain goods based on their resources. They then trade those goods for goods they need from other countries.





Trade is the voluntary exchange of goods and services among people and countries. Trade and voluntary exchange occur when buyers and sellers freely and willingly engage in market transactions. When trade is voluntary and nonfraudulent, both parties benefit and are better off after the trade than before. Goods that are sent to other countries for trade are called **exports**. Goods that are brought into a country for trade from other countries are called **imports**.

Barriers to Trade

While countries benefit from trade, there can be negative effects. Too much trade with other countries can cause domestic workers (workers in their country) to lose jobs. For example, if another country produces shoes at a lower cost than Mrs. Park's company, consumers might not buy as many shoes, and the company could go out of business, leaving the workers with no job.

To avoid this problem, countries sometimes try to limit trade with other countries by creating economic trade barriers. The most common types of trade barriers are tariffs and quotas. A **tariff** is a tax on imports, and a **quota** limits the number of imports entering a country. Tariffs and quotas make the price of imported goods more expensive, with the goal that consumers will buy the cheaper goods made within the country.

Another kind of trade barrier is an embargo. An **embargo** is a government order stopping trade with another country. The goal of an embargo is to force a country to change its behavior to one more acceptable to other countries.

In Other Words

Economic trade barriers are sometimes referred to as economic sanctions.

Did You Know?

Economic trade barriers are not the only kind of trade barrier. Physical features, like deserts and mountains, can also act as trade barriers.

Below: The U.S. provided more than \$40 million in aid to African farmers in 2024 to help them increase their food production. **Opposite Page:** A rupee is the currency used in India. **Opposite Page, Inset:** Example of Southeast Asia exchange rates.

Subsidies are another kind of trade barrier. A **subsidy** is when the government of a country gives money to certain businesses to help them lower costs and give them an advantage over imports from other countries. For example, the United States provides subsidies to some farmers to continue to grow their products and be competitive with other countries that use cheaper labor on their farms. The final type of trade barrier is a **standard**. A standard is when the government sets limits and rules regarding imports and domestic goods.

Should countries create trade barriers that limit trade? Some workers in certain industries may indeed be hurt by trade. For example, some U.S. clothing workers lost jobs during the past 30 years because many clothes that were once manufactured in the United States are now manufactured and imported from other countries. However, trade allows consumers in the United States to purchase clothing for a lower cost. Many believe this results in a higher standard of living for people in the United States and its trading partners.





Currency	Buying Rate	Selling Rate
USD	29.75	30.55
GBP	47.85	49.27
EUR	42.21	43.18
CNY	4.28	4.88
JPY	37.45	38.94
MYR	9.21	10.28
AUD	31.68	32.85
HKD	3.77	4.00
KOR	0.022	0.033
PHP	0.47	0.76

Trade and Exchanging Currencies

Currency is the money people use to make trade easier. People in the United States use dollars (U.S.D or \$) to purchase goods and services. Workers in the United States are paid in U.S. dollars. In other countries, different currencies are used. Usually, trading in another country requires using that country's currency instead of U.S. dollars. Trading with other countries, then, requires exchanging currencies.

For example, a Georgia farmer may choose to sell cotton to a manufacturing company in India. The Indians use rupees as currency, but the Georgians want U.S. dollars. Somewhere along the way, rupees must be exchanged for dollars. Foreign exchange markets buy and sell international currencies. An **exchange rate** is the price of one nation's currency in terms of another nation's currency. Foreign exchange markets help individuals and companies by making trade around the world easier. The Indians, in this example, must sell their rupees for U.S. dollars to trade with the Georgia farmers. If you know someone who has traveled outside the United States, they probably had to exchange their U.S. dollars for a currency to purchase goods and services in the country they visited.

Today, U.S. consumers often use credit cards to purchase goods and services in other countries. The bank issuing the credit card sells the American's U.S. dollars and exchanges them electronically for local currency. This makes purchasing goods and services in other countries much easier than in the past.

REVIEW AND SUMMARIZE

1. What are three things that affect demand?
2. What is the relationship between supply and demand?
3. Why is it important for countries to trade?
4. Why are exchange rates important for trade?

SECTION 3

Economic Systems and Growth



AS YOU READ, LOOK FOR...

- » the job of an economist;
- » the three basic economic questions that every country must answer;
- » the three types of economies and their strengths and weaknesses;
- » how economies are measured;
- » the importance of resources to a country's economy;
- » how the factors of production help an economy grow;
- » terms: **economist, traditional economy, barter, command economy, market economy, mixed economy, economic continuum, Gross Domestic Product (GDP), Consumer Price Index (CPI), inflation, unemployment, factors of production, natural resources, renewable, nonrenewable, capital goods, infrastructure, human capital, entrepreneurship, income, expenses, literacy rate, life expectancy.**

Economic Models

A person who studies the economy is called an **economist**. Economists seek to understand how people and governments address the issue of scarcity and decide how to allocate limited resources. No country has everything its people want and need. Therefore, every country must develop an economic system to determine how to use its limited resources to answer the three basic economic questions: (1) What goods and services will be produced? (2) How will goods and services be produced? (3) For whom are the goods and services produced? The way a society answers these questions determines its economic system.

These economic questions are answered by different people in different ways depending on the economic system a society has in place. Economists have devised various models to explain the kinds of economic systems societies have developed. These models do not describe every economic system perfectly. All societies have an economy that blends more than one economic system model. Although the models are imperfect, they generally describe the characteristics that shape an economic system. The three economic systems are a traditional economy, a command economy, and a market economy.

Opposite Page: Economists often analyze complex charts to understand how people and governments allocate their limited resources.

Figure 3.2 Three Basic Economic Questions**What to produce?**

This question deals with identifying which goods and services an economy will produce and in what quantities.

How to produce?

This question focuses on the methods and resources used to produce goods and services, including technology, labor, and capital.

For whom to produce?

This question addresses how the produced goods and services will be distributed among the population, considering income, wealth, and social needs.





Traditional Economy

Three aspects help to define a **traditional economy**. First, it tends to be heavily dependent on agriculture. Second, people tend to **barter** (use items of value rather than money or precious metals for exchange). Third, economic decisions are often made based on long-held customs (traditions), beliefs, or habits. Because of this, change comes slowly, and a person is likely to do the same kind of work his or her ancestors did.

In a traditional economy, the customs and habits of the past are used to decide what and how goods will be produced, distributed, and consumed. In this system, each member of the society knows early in life what her or his role in the larger group will be. Because jobs are handed down from generation to generation, there is very little change in the system over the generations. In a traditional economy, people are depended upon to fulfill their traditional roles. The system can break down if some people are not there to do their part. Farming, hunting, gathering, and cattle herding are often part of a traditional economy. While aspects of a traditional economy may exist in rural or remote areas, no country today has a traditional economy.

Command Economy

In a **command economy**, government planning groups make the basic economic decisions to answer the three basic economic questions. They determine such things as which goods and services to produce, the prices, and wage rates. The government owns businesses and farms. Workers at a factory are told what to produce and how much to produce in a given time. The government assigns production goals to all workers. The expectation is that when all workers meet all goals, everyone in the country will be able to have the goods they need when they need them.





This type of economy has problems and benefits. One problem is predicting exactly what goods people will need. For example, the government may think that building tractors is important. More tractors could mean farmers can grow more crops, which means more people have the food they need. However, if factories are busy making tractors, they might not make enough delivery trucks. The country may have plenty of food but no trucks to deliver it to consumers. A benefit of this economy is that prices are controlled, and people know exactly how much everything will cost. For example, food prices are always kept low because food is a basic need of all people. The cost of clothing and housing is kept low as well. However, consumers often have fewer choices. The government provides health care and education at no cost. The cost of things that are considered luxuries, such as televisions or computers, may be very high because these are not considered basic needs. The government also sets wages for different jobs.

Market Economy

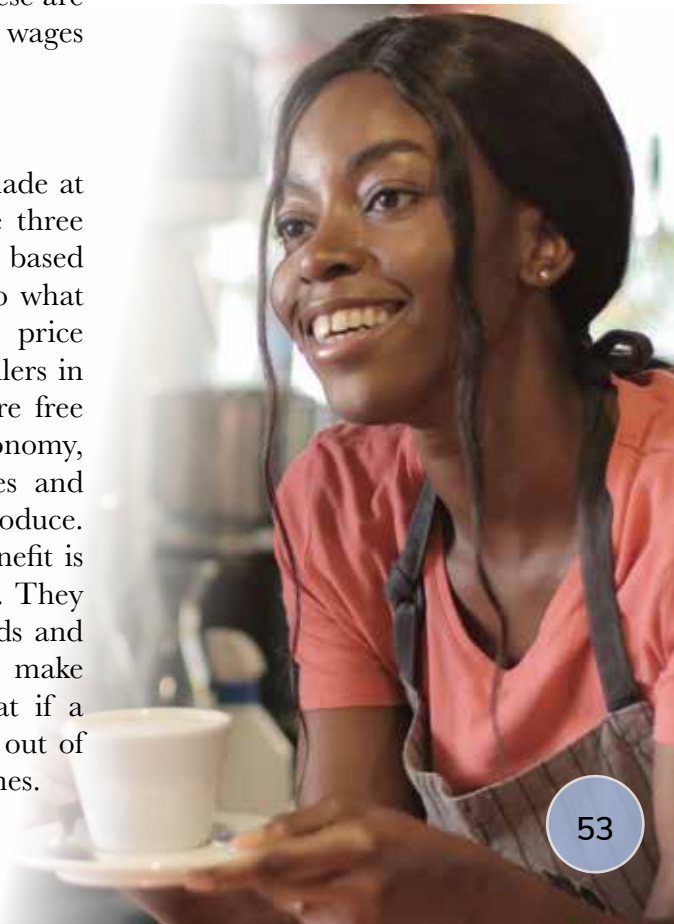
In a **market economy**, economic decisions are made at an individual, rather than a government, level. The three basic economic questions are answered by producers based on their beliefs about how consumers will respond to what they produce. Production decisions are guided by price changes that occur between individual buyers and sellers in the marketplace. Other names for market systems are free enterprise, capitalism, and laissez-faire. In a market economy, individuals or corporations generally own businesses and farms. Each business or farm decides what it wants to produce. Market economies have benefits and problems. A benefit is that consumers can usually find the goods they want. They can earn as much money as possible to buy the goods and services they want. Businesses can find new ways to make better products and lower prices. A problem is that if a company does not manage its money well, it can go out of business, and the workers can lose their jobs and incomes.

Opposite Page Top:

Agriculture is often part of a traditional economy.

Opposite Page Bottom:

Family roles are governed by customs in a traditional economy. **Above:** In a command economy the government owns the businesses and sets wages for the jobs. **Below:** In a market economy there are many choices because economic decisions are made at an individual level.



In Other Words

The term *laissez-faire* comes from the French words *laissez* (let) and *faire* (do). The term indicates that you should “let people do as they choose” without interference from the government or other authorities.

All Economies are Mixed

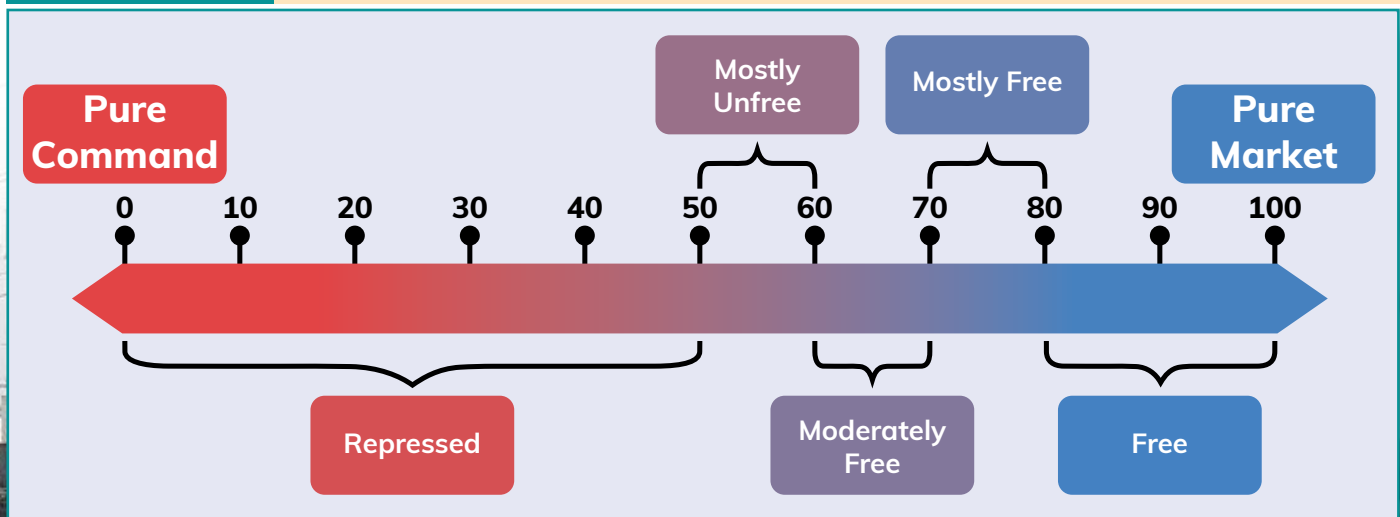
There are no countries today that have pure command or pure market economies. The economies of all countries today have characteristics of both systems and are often referred to as **mixed economies**. However, most economies are closer to one type of economic system than another. In a truly free market economy, for example, the government would not be involved at all. There would be no laws to protect workers from unfair bosses. There would be no rules to make sure credit cards were properly protected. Many societies have chosen to have some rules to protect consumers, workers, and businesses. These rules reduce businesses’ freedoms, but they also protect workers and consumers. Mixed economies come in many forms. In the United States, the government makes laws to govern businesses. However, the government rarely owns businesses or controls production or prices.



We use an **economic continuum** to help understand where a country falls between command and market economies. On one end, at 0, is a pure command economy. At the other end, at 100, is a pure market economy. Countries move back and forth on the continuum based on the government's actions—whether they are more active or less active in the economy. A government can be viewed as “active” by adding rules, regulations, tariffs, and quotas to the businesses in the country. In this case, the country would move toward the command side of the economic continuum. When rules, regulations, and trade barriers are removed, the government is considered “less active,” and the country's position on the economic continuum moves toward the market side.

Background: Japan has a market economy with the decisions made at an individual level.

Figure 3.3 Economic Freedom Continuum



Bottom: India's population is growing but its GDP is much lower than South Korea.

In Other Words

One definition of gross is “total.” The word domestic means “within a country.” So, gross domestic product is the total value of goods and services produced within a country in one year.

Measuring the Economy

Economists have many ways to measure an economy’s strength. Businesses, individuals, and the government use this information to make better economic decisions. One of the most important economic indicators is the **Gross Domestic Product (GDP)**. This measures the total value of the final goods and services produced within a country’s borders in one year.

The GDP per capita, or per person, is also used to measure an economy’s strength. The GDP per capita is the GDP divided by the number of people in a country. The GDP per capita is more useful when comparing two countries’ economies. For example, in 2022, the GDP of India was about \$3.417 trillion while the GDP of South Korea was \$1.674 trillion. These numbers seem to show that India has a stronger economy than South Korea. However, India has many more people than South Korea. The population of India was about 1.4 billion, while the population of South Korea was about 52 million. Dividing the GDP of these countries by their population numbers gives the GDP per capita: about \$7,100 for India, and about \$45,600 for South Korea. This comparison shows that South Korea has a stronger economy than India because it considers the difference in population size between the two countries.

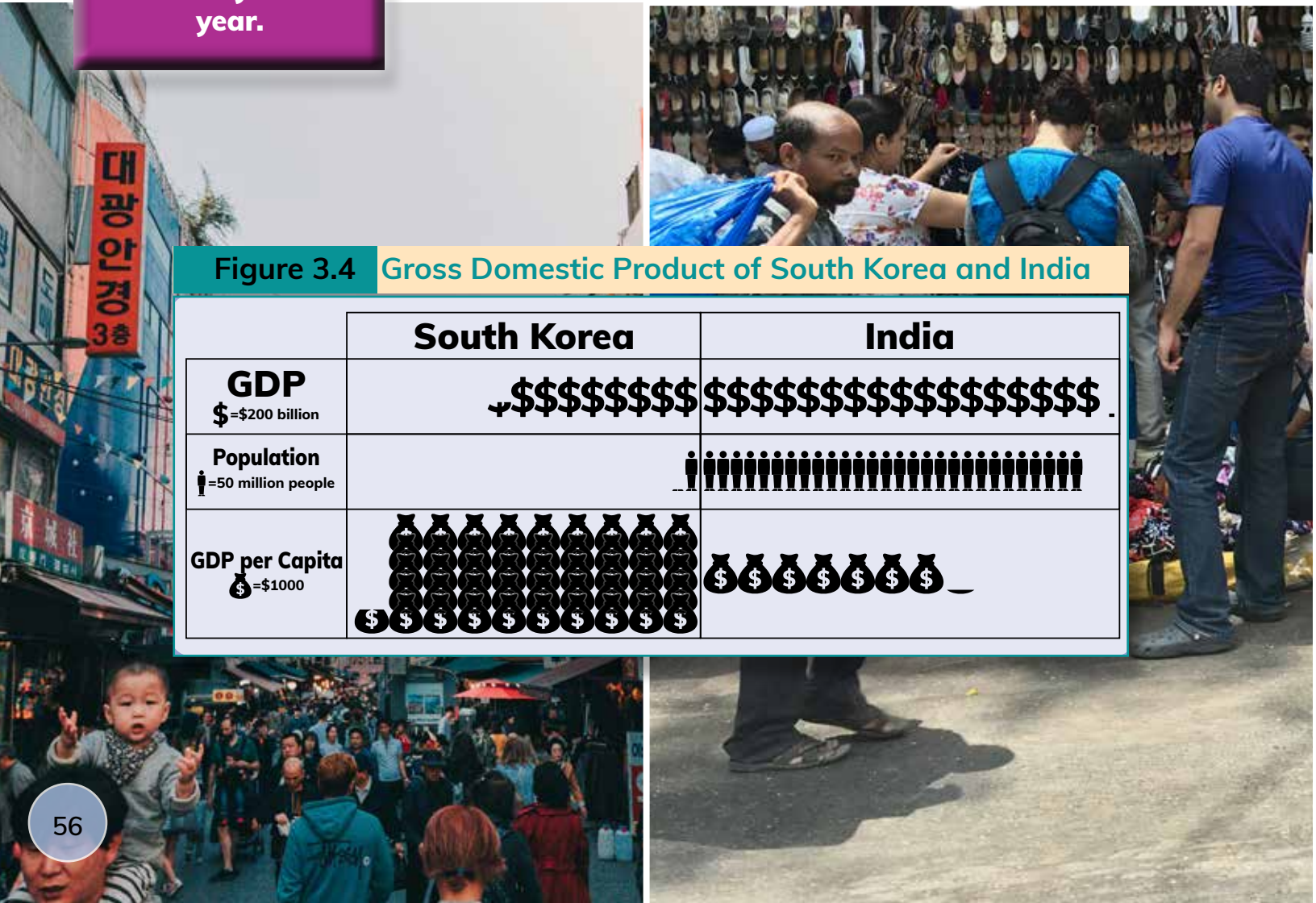
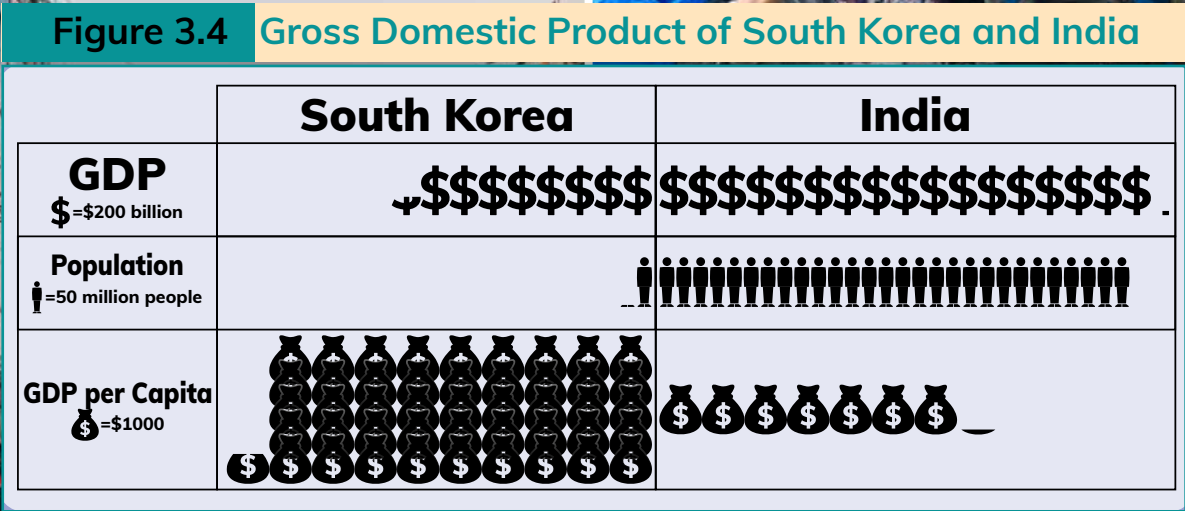
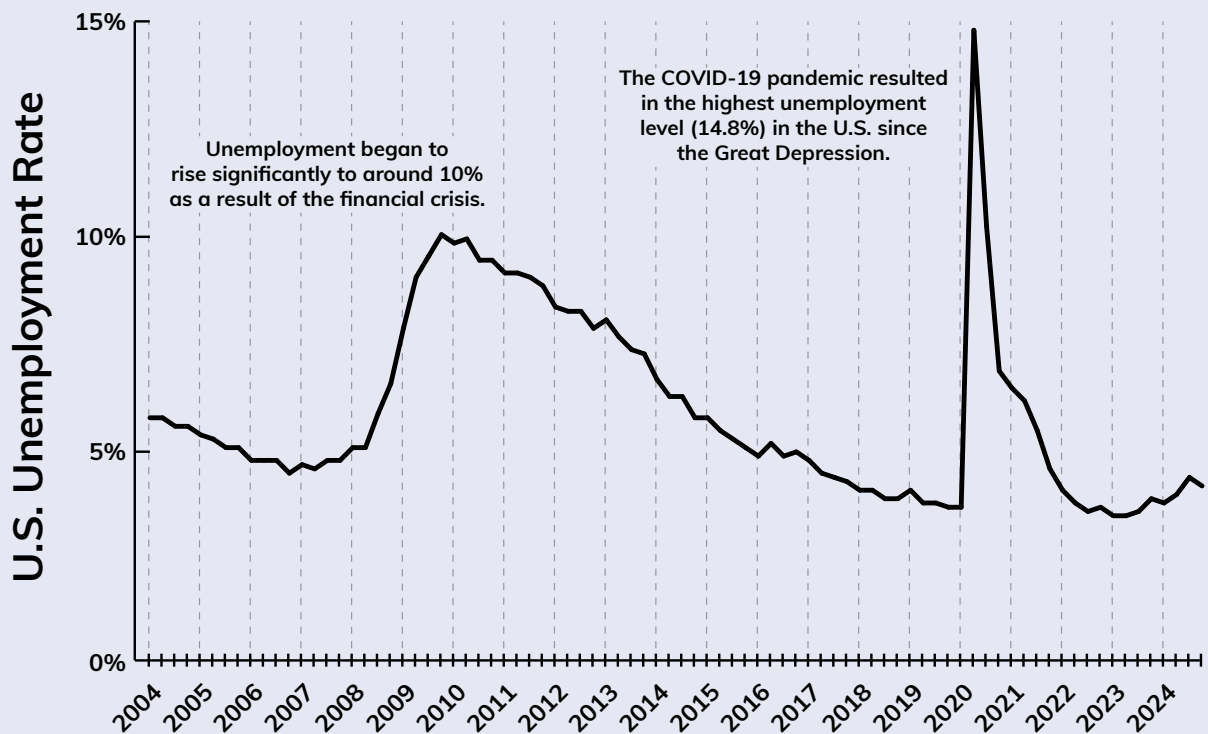


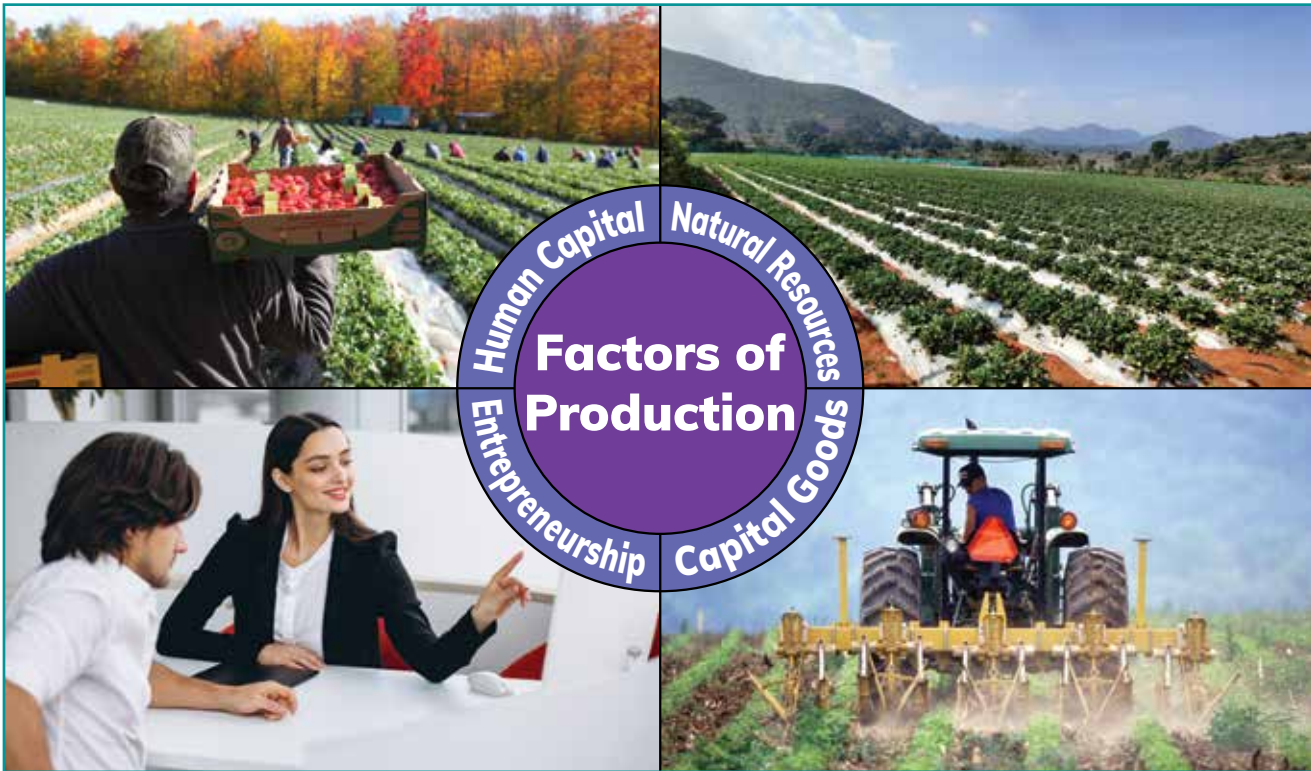
Figure 3.5 U.S. Unemployment Rate

Source: U.S. Bureau of Labor Statistics

The **Consumer Price Index (CPI)** measures prices in a country. Each month, the prices of goods and services are checked to see if they rose or fell compared to previous months. When the CPI shows that prices are rising steadily, this indicates **inflation** (a continual increase in the price of goods and services). In this situation, price increases mean a buyer can afford less with the same amount of money. If wages do not increase at a level to keep up with inflation, a consumer's spending power decreases.

The **unemployment** rate is another very important economic number. A person is described as unemployed if he or she does not have a job but has been actively looking for one and is available to work. Each month, a government report shows the percentage of people who are out of work and are looking for jobs. If the supply of jobs is low, workers are often willing to accept lower pay to have a job. If unemployment rates are low, businesses will have to pay a higher wage because the supply of available workers is smaller.

Figure 3.6 Factors of Production



Factors of Production

Societies have created many ways to provide goods and services for their people. To do so, a society must have resources. Resources are the building blocks of an economy needed to produce goods and services. These resources are known as **factors of production** or productive resources: natural resources, capital goods, human capital, and entrepreneurship. Individuals, businesses, and governments use the factors of production to produce goods and provide services. These factors directly relate to economic growth because they represent the things needed to produce goods and services.

Natural Resources

Natural resources are products of Earth and its atmosphere that are useful to humans. For example, plants and animals are biological resources. These resources are **renewable**; they can replenish themselves over time. Humans must play a role in the renewal process because biological resources are often farmed, harvested, or hunted. Forests are a renewable natural resource. A forest is an area rich in plants and animals where trees are the main plant. These plants and animals can be used to produce goods that people want and need. Mineral resources are natural substances found inside Earth. Slow geological processes form them. Minerals become a resource when they exist in enough quantity that they can be extracted or removed from Earth for economic gain. Unlike biological resources, mineral resources are **nonrenewable**. Once taken from Earth, they are not replaced by nature. Examples of mineral resources include coal, oil, gold, and diamonds.

Capital Goods

Capital goods are the tools used in the production of goods and services. It takes some capital resources to transform a natural resource into a product. Capital goods, also known as capital tools, can include textile mills, furniture factories, printing shops, and chemical plants. The machines and equipment inside these processing facilities are also capital resources. Another part of capital goods is infrastructure. **Infrastructure** is the basic structures and buildings a country needs to function. Infrastructure includes electric power lines, roads, bridges, train systems, ports, telecommunication systems, sewer systems, and water treatment facilities.

Human Capital

The term **human capital** describes the people who produce goods or services. A human can transform a natural resource into a good through effort and activity. Human beings are an economic resource when they supply the physical or mental labor that transforms a resource into a good or service. In an economic system, laborers (workers) are paid for their work. Today's interconnected state, national, and global economies require new skills and specialization. People who want good jobs need to have education and specialized training to make them attractive to employers.

Entrepreneurship

The final factor of production is **entrepreneurship**. When people start their own businesses, they are called entrepreneurs. They risk their money and time in the hopes of creating a successful business. To be successful, the business must earn a profit. The business must sell goods or services to generate **income**. It will have costs related to the business called **expenses**. The company is successful if its income is greater than its expenses. This is called earning a profit, and it is what motivates entrepreneurs to take risks.

Entrepreneurs have two characteristics that make them special. First, they are creative, innovative thinkers who come up with ideas for new or improved goods and services that other people would like to have. Second, they are willing to risk their limited natural, human, and capital resources to produce these goods and services. Some examples of Georgia entrepreneurs are Bernard Marcus and Arthur Blank, who founded Home Depot; Renee Montgomery, vice-president of the WNBA Atlanta Dream; and Truett Cathy, founder of Chick-fil-A. There are thousands of small business owners throughout the state who are also entrepreneurs.

In Other Words

Economists sometimes use the term “Land” instead of “Natural Resources” and “Labor” or “Human Resources” instead of “Human Capital.”

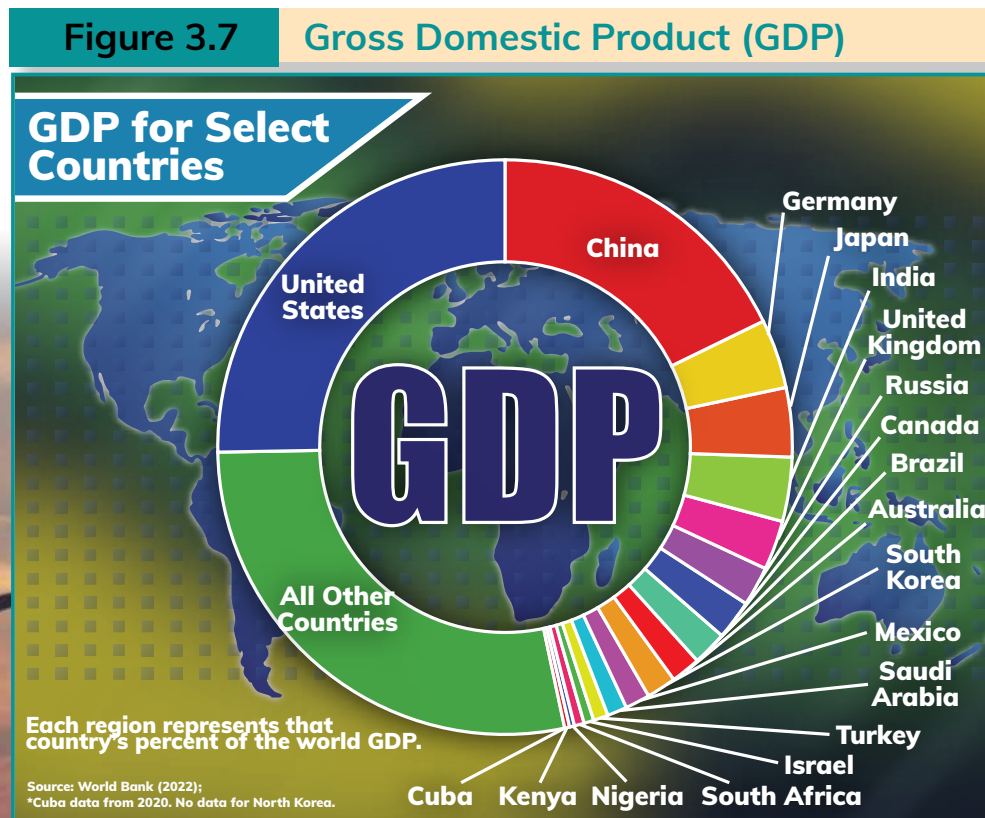
Increasing the Gross Domestic Product

When a country's GDP increases, it is one sign that the people in the country can better satisfy their needs and wants. To improve a country's GDP, the government and its people may choose to invest in the factors of production, or the factors of economic growth. This means investing in human capital, capital goods, natural resources, and entrepreneurship.

Investing in Natural Resources and GDP

Investing in natural resources can also help a country's GDP grow. Countries can invest in renewable resources by developing ways to harness their power, like solar or wind energy. Countries with valuable resources often rely on these resources as a large part of their GDP. Saudi Arabia, for example, has one of the largest deposits of petroleum in the world. Saudi Arabia's GDP relies on petroleum sales.

Bottom: Countries have invested in wind energy to reduce the costs of using fossil fuels like petroleum.





Investing in Capital Goods and GDP

To increase the GDP, countries must also invest in capital goods. These include the factories, machines, technologies, buildings, and property needed for a business to operate. If a business is to be successful, it cannot let its equipment break down or allow its buildings to fall apart. New technology can help a business produce more goods at a lower cost.

Here is an example. The Hóng Lóng Company makes T-shirts. Its equipment has been used for 30 years. The company makes good shirts and employs about 100 workers. Customers are satisfied with the quality and price. A new company, Kuài Hóuzi, opens. This company has invested in new technology that reduces the cost of T-shirts. Machines do much of the labor, so the new company has only 20 workers, which lowers the cost of labor. Kuài Hóuzi sells its shirts for less than Hóng Lóng. Customers are satisfied with the new shirts' quality and like the lower prices. Hóng Lóng Company has a problem. It is losing customers to the new company, so its owners made the decision to invest in newer and better equipment to make more shirts for a lower price. They are investing in capital goods.

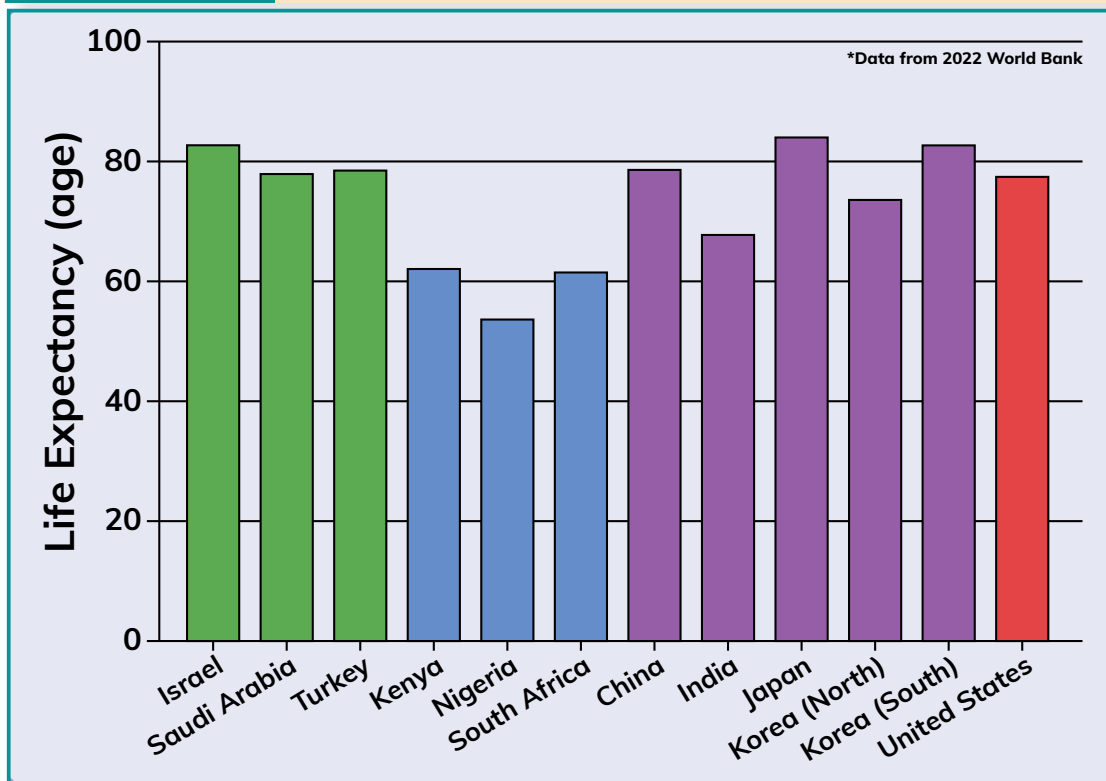
Above: A factory-owner may invest in robots to make manufacturing more efficient.
Bottom: Human resources are used to increase the value of the products made.



Investing in Human Capital and GDP

The Gross Domestic Product can be used to tell if a country's economy is improving or not. An increase in the country's GDP can mean a higher standard of living for the country's people. To increase the GDP, countries must invest in human capital. This includes education, training, skills, and health of the workers in a business or country. If the workers in a country are uneducated or untrained, they will be limited in the kind of work they can do. An unskilled workforce limits the types of industries that can develop. If workers are unhealthy, they cannot produce the needed goods and services. Businesses and countries that want to be successful must pay attention to investing in human capital. Successful businesses help to increase a country's GDP and improve the standard of living for all. One of the ways economists measure a country's investment in human capital is by looking at the country's literacy rate. One definition of **literacy rate** is the percentage of the population over the age of 15 that can read and write. Economists also look at the **life expectancy** of a country, which is the average age that people live in that country.

Figure 3.8 Life Expectancy at Birth for Select Countries (2022)





Left: The Japanese government provides numerous incentives to support small businesses and has a strong legal system to safeguard business owners.

Investing in Entrepreneurship and GDP

Entrepreneurship is another way a country can increase its GDP. To increase the number of entrepreneurs, a country may provide financial assistance, such as business loans, or create laws that reduce barriers to starting a business. Japan is one of the leading countries in the world for the number of successful entrepreneurs which contributes to Japan's high GDP.

REVIEW AND SUMMARIZE

1. What are the three basic economic questions every country must answer?
2. Copy the chart below and complete it with information from the text.

Type of Economy	How are the 3 Questions Answered	Advantages of the System	Disadvantages of the System
Traditional Economy			
Command Economy			
Market Economy			

3. Why do you think traditional economies are only found in rural areas today?
4. Why is Gross Domestic Product per capita a better measure of the strength of a country's economy than Gross Domestic Product?
5. How does investment in the four factors of production help a country's economy?

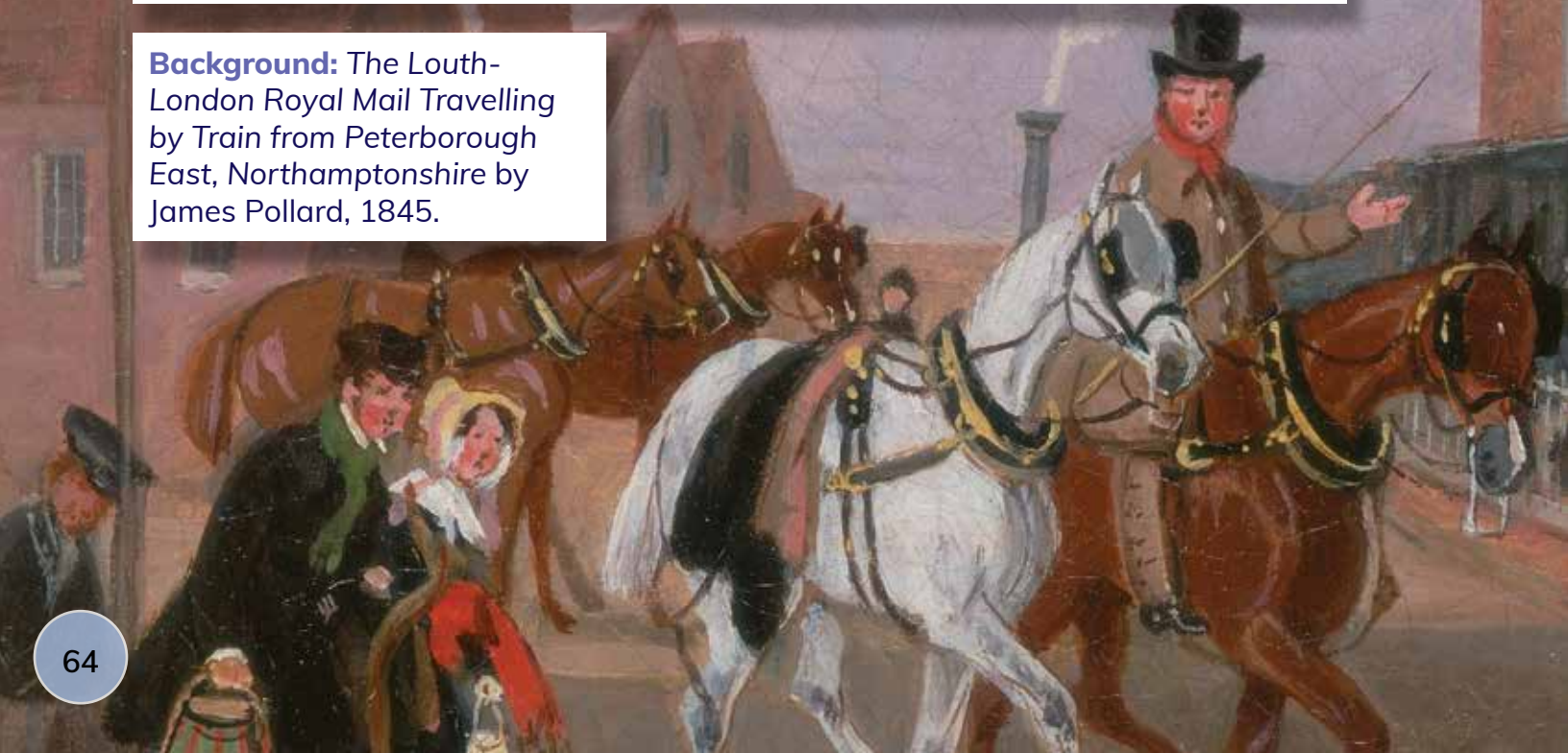
Special Feature The Industrial Revolution

In Europe, between 1300 and 1750, families tended to live on small plots of land, growing crops mostly for their own use. They used hand tools that had hardly changed over time. Most people had little money and struggled to meet their basic needs. There was little emphasis on education for children. The population during that time grew slowly because of poverty, war, plagues, and poor hygiene.

Several things happened that caused dramatic changes in the way people lived. First, some cities became thriving markets for crafts and agricultural goods. Other cities began to focus on learning, which led to innovations and inventions. Improvements in navigation, such as use of the compass, allowed Europeans to sail across the ocean in the late 15th century. As trade among nations grew, England began to use credit in banking by using money that people deposited and loaning it out for a fee to businessmen who needed the money to create and expand businesses. The climate for invention and the availability of money to support new ideas brought about changes in the lives of people throughout Europe. The first wave of change came in the period known as the Agricultural Revolution. Invention of mechanical tools such as seed drills, reapers, and threshers increased production.

The changes in farming created the climate for the next wave of change, the Industrial Revolution. The Industrial Revolution began in Great Britain because it had a stable economic and political environment. British factories took cotton from the New World and made cloth to trade in global markets. New inventions increased the production of cloth. The size and number of machines created the need for special buildings, called factories, to house the machines. The textile industry became the largest employer in Great Britain, and cotton cloth became the most valued commodity in Britain's export trade. After the invention of the steam engine in 1781, many factories were built beside streams of water. This allowed the new machines to be powered first by water and later by steam.

Background: *The Louth-London Royal Mail Travelling by Train from Peterborough East, Northamptonshire* by James Pollard, 1845.



As global trade grew, there was a demand for better transportation. Again, the steam engine revolutionized how people traveled and traded. Steam engines propelled ships and later railroads. Britain's coal fueled the engines, and its iron was used to manufacture locomotives, railroad cars, and track.

Better transportation resulted in expanded trade. New trade routes brought industrial nations in contact with new trading partners, which led to the rise of imperialism (empire building or the act of one country extending its power by gaining new territories). As the most industrialized nations began looking for new sources of labor, raw materials, and goods to trade, they turned their attention to less developed areas, especially Africa and Asia. Britain's influence in India and China meant that English wool and Indian cotton could be traded for Chinese tea and textiles. Besides Great Britain, the countries of France, Portugal, Spain, the Netherlands, Germany, and Italy began to expand trade by imperialism.

The Industrial Revolution improved the lives of people in many ways; however, it also had some negative effects. In industrial countries, working conditions in factories were often poor. Men, women, and children worked long hours for very low wages in dangerous conditions. The countries that were taken over by the industrial nations often lost not only their resources but their independence. Some were forced to change their lives and culture to accommodate the new ideas brought to them by colonists from the European nations.

Today, some say we are in a digital revolution. What evidence is there that you are living in a time of digital revolution?



Chapter Review

CHAPTER SUMMARY

Section 1: Economic Fundamentals

- Humans have needs, which are necessary to live, and wants, which are not necessary but make life more comfortable and enjoyable.
- Wants and needs are satisfied when producers provide goods and services, and then consumers buy them.
- Scarcity occurs when we try to satisfy unlimited wants with limited resources.
- Because of limited resources, producers choose how much and what to make, and consumers choose what is most important to buy.
- Resource allocation refers to how societies decide how to distribute limited resources.
- Trade-offs and opportunity costs show that economic decisions are also about loss and thinking creatively to maximize your resources.

Section 2: Trade

- Prices are determined by the supply (the quantity of goods) and the demand (how much the consumer is willing to pay for a good).
- Economists study the economy by understanding how different governments address the issue of scarcity.
- Voluntary trade benefits all parties by helping countries combat scarcity and encourage specialization for an efficient and strong economy.
- Sometimes, countries try to limit their trade by placing tariffs and quotas on imports, subsidizing their own country's producers, and even ordering embargoes.
- Countries use exchange rates in order to ensure that trade is fair between the countries.

Section 3: Economic Systems and Growth

- Countries must answer three basic questions that define their economic system: What will we produce? How much will we produce? For whom will we produce?
- In a traditional economy, past customs and roles are passed down, dictating what is produced and how it is distributed and consumed.
- In a command economy, government planning groups make economic decisions and own the businesses and farms that produce goods.
- In a market economy, privately owned businesses make economic decisions based on what they think consumers can afford and want.
- Gross Domestic Product (GDP) measures the total value of a country's final goods and services over one year. It is important for measuring a country's economic strength.
- There are four factors of production: natural resources, capital goods, human capital, and entrepreneurship.
- Natural resources are the products of the Earth. Some are renewable, and some are nonrenewable.
- Capital goods are the tools and equipment used to transform natural resources into goods for sale.
- Human capital is the value of a person's skills and education.
- Entrepreneurship is when people invest money and labor in their own innovative businesses instead of working for others.

ACTIVITIES FOR LEARNING

Reviewing People, Places, and Things

Create a crossword puzzle with the following words. Create clues for each of the words.

wants
consumer
currency
needs
goods
producer
embargo
scarcity

Understanding the Facts

1. What are the four factors of production?
2. What is the difference between goods and services?
3. Give an example of a trade-off.
4. How does scarcity encourage trade?
5. How does a producer calculate profit?
6. What is one benefit of a command economy?
7. What two investments can a country make to improve its GDP?
8. What are four common barriers to trade?
9. Why are exchange rates important?

Developing Critical Thinking

1. Why do you think the economic continuum is important to economists? What could an economist infer about a country based on its rating?
2. How does the use of renewable resources, instead of nonrenewable resources, benefit both the producer and consumer?

Writing across the Curriculum

Write two short stories where you act as a consumer. The first story should be about satisfying a need. The second story should concern satisfying a want. Be sure to include these terms: goods, services, and producer.

Applying Your Skills

Think of five goods to purchase, and create a table with the goods listed as the first column. Be sure to choose goods that have been available since at least 1915. Then add the years 1915, 1945, 1965, 1995, 2005, 2015, and 2024 at the top of each column. List each good's current price in the last column. To track inflation, go to www.bls.gov/data/inflation_calculator.htm and calculate the equivalent price for the other years.

Exploring Technology

Use the Internet to research current exchange rates. How strong is the U.S. dollar compared to the Saudi Arabian riyal, South African rand, or Indian rupee? How could these exchange rates affect trade with the United States?